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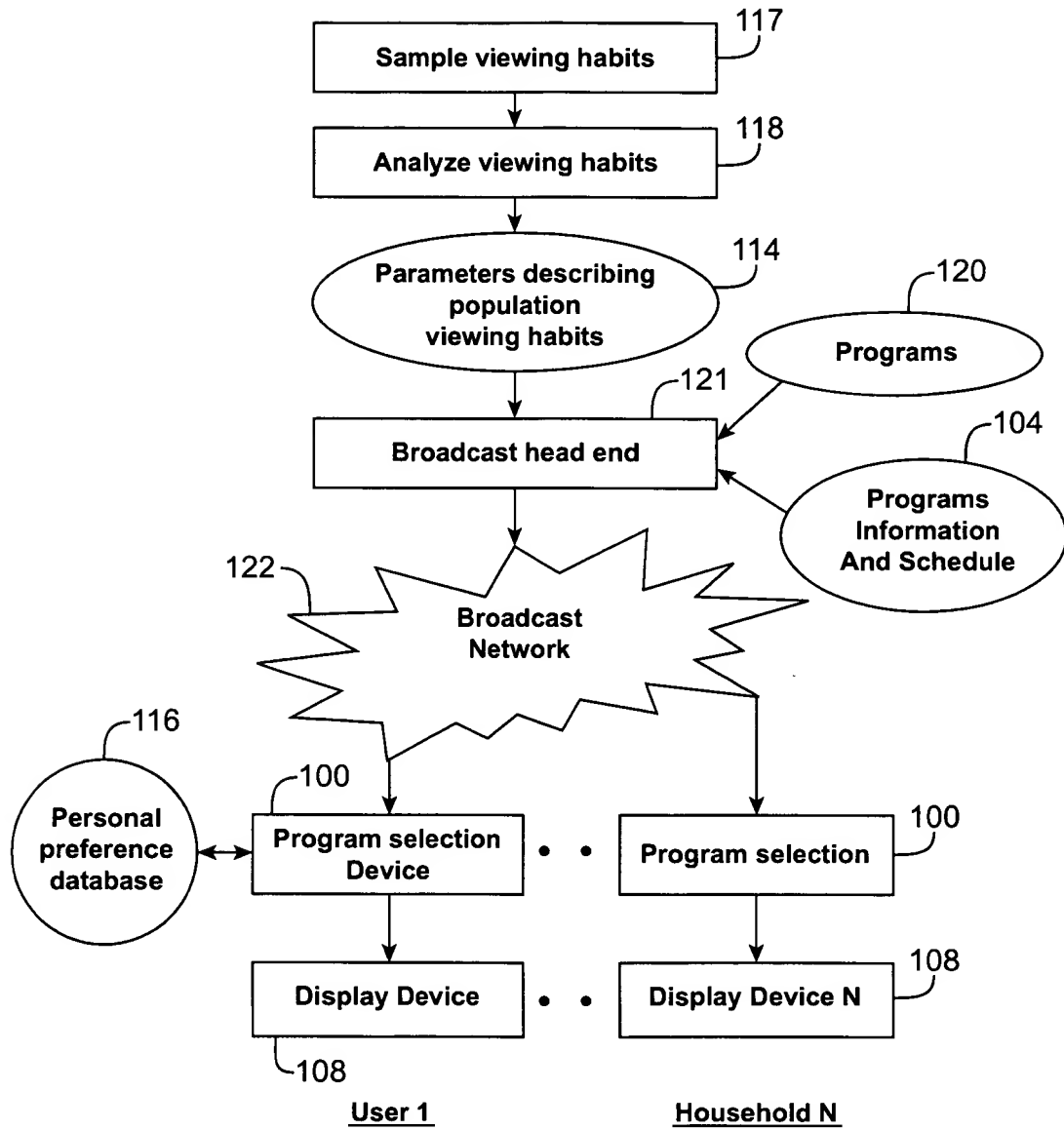


FIG. 2

### Examples of Program Information

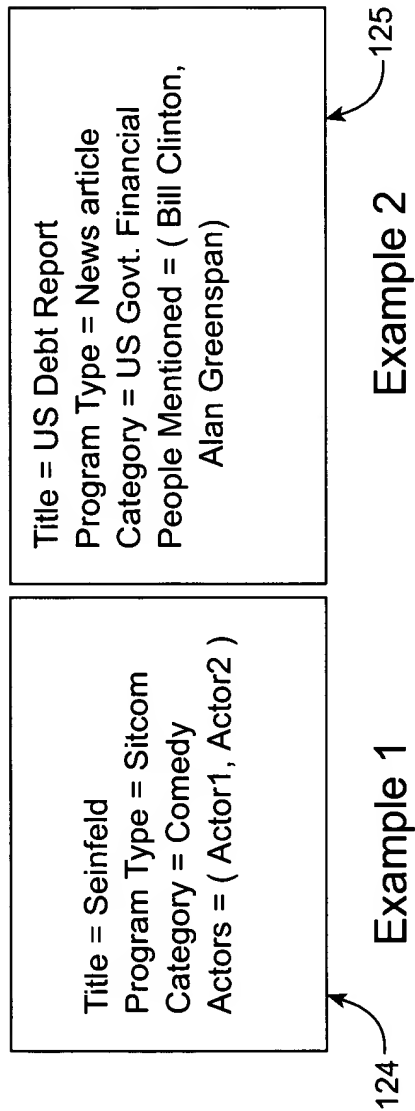
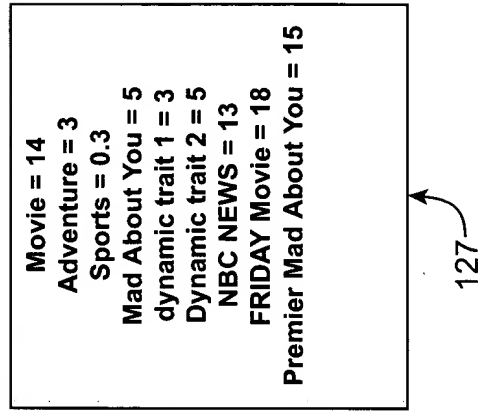


FIG. 3

Examples for Liking for viewer N



Examples for traits

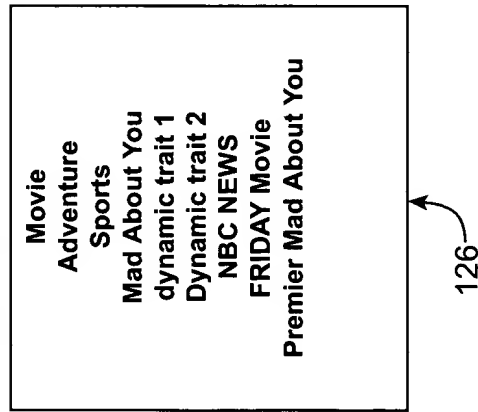


FIG. 4

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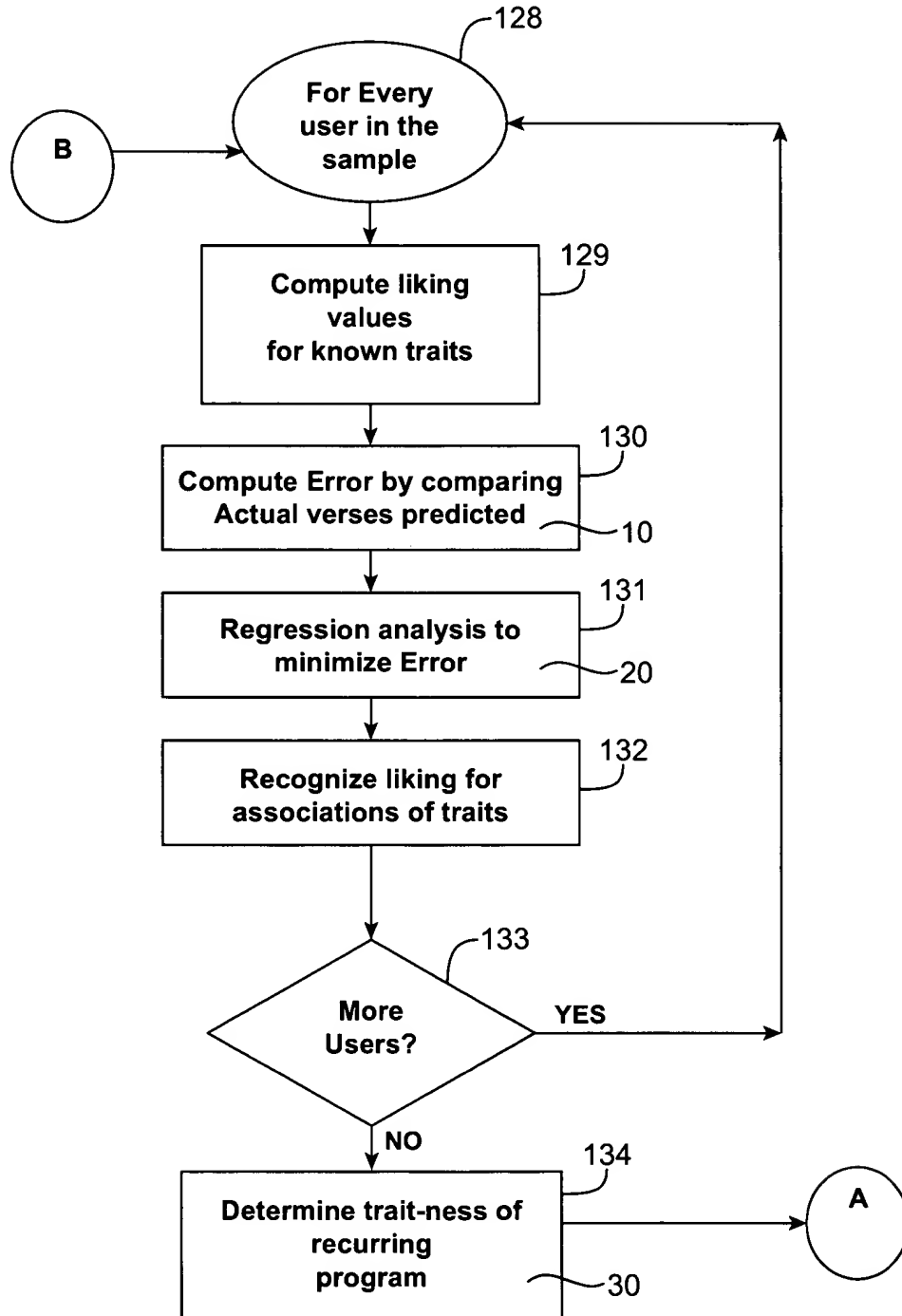


FIG. 5(a)

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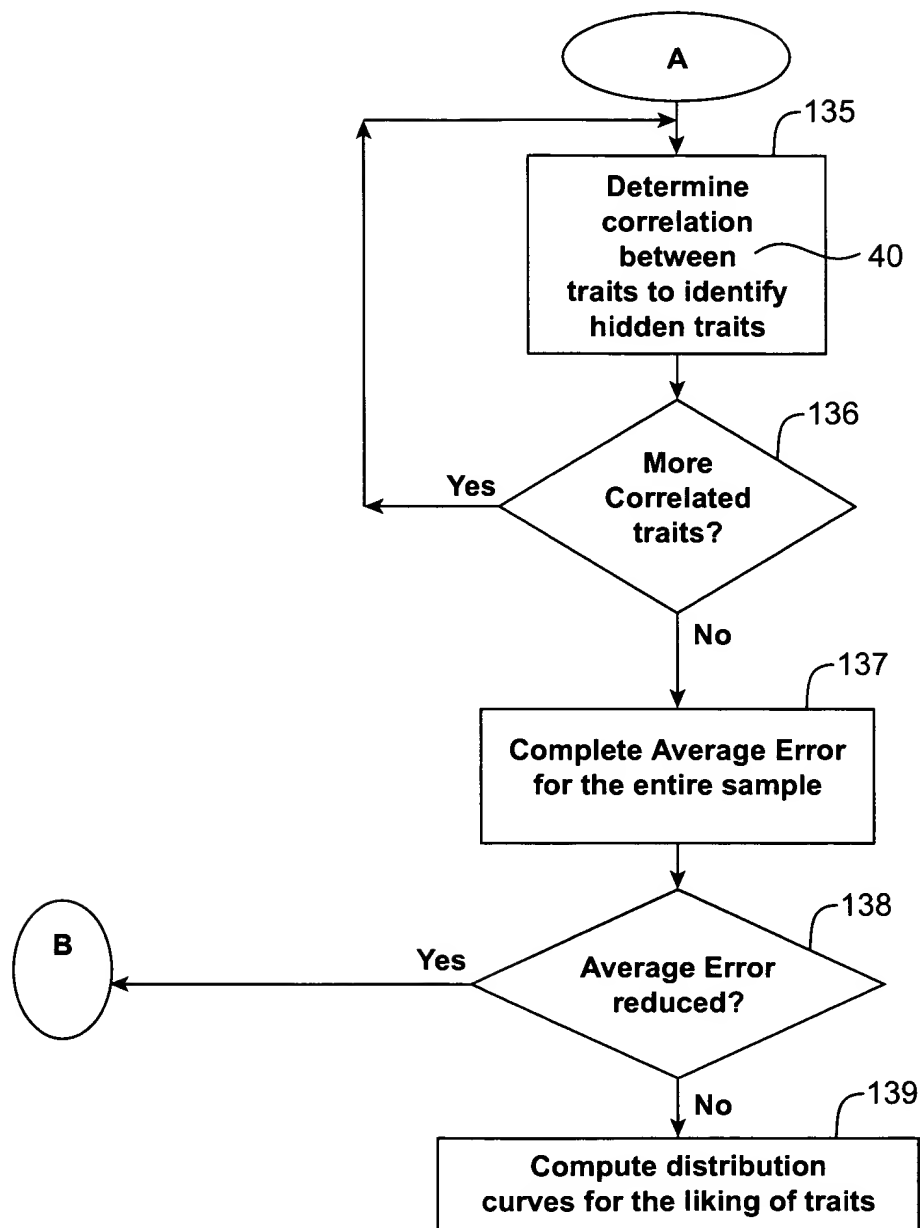
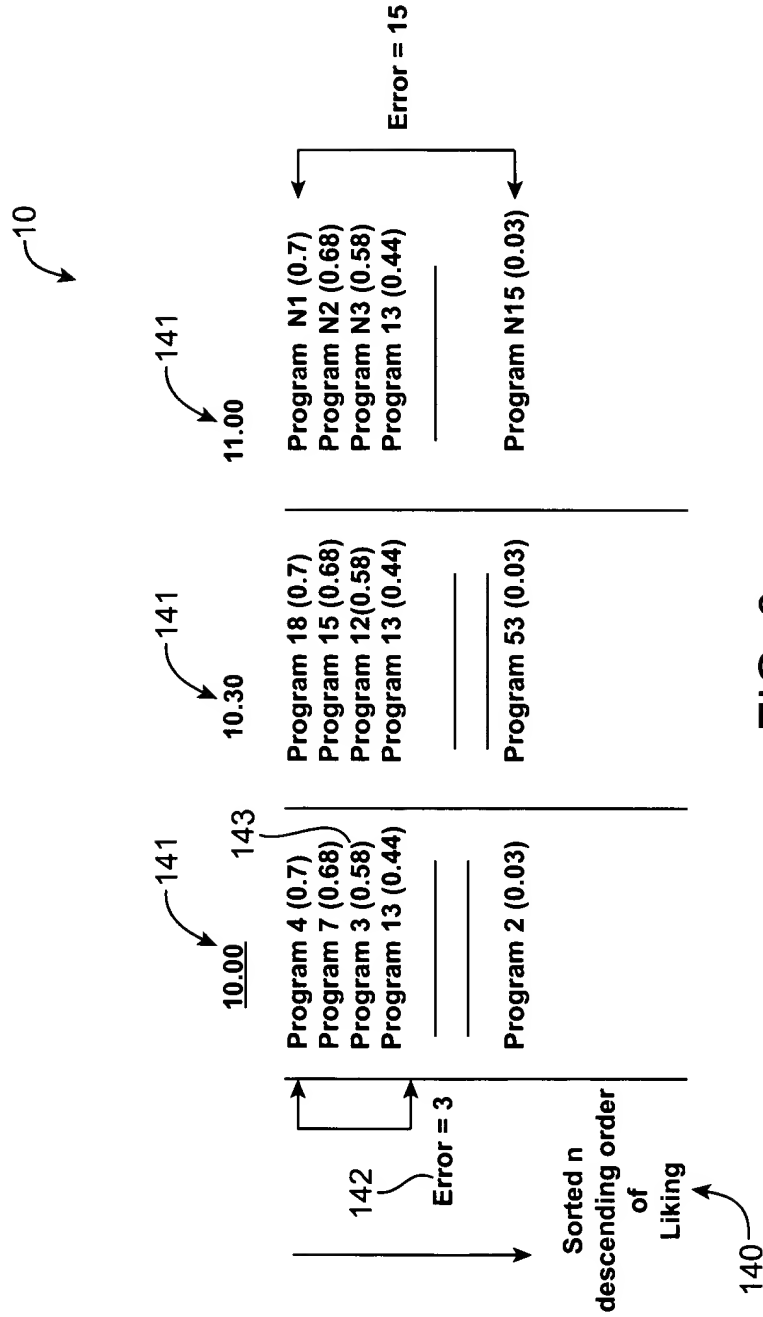


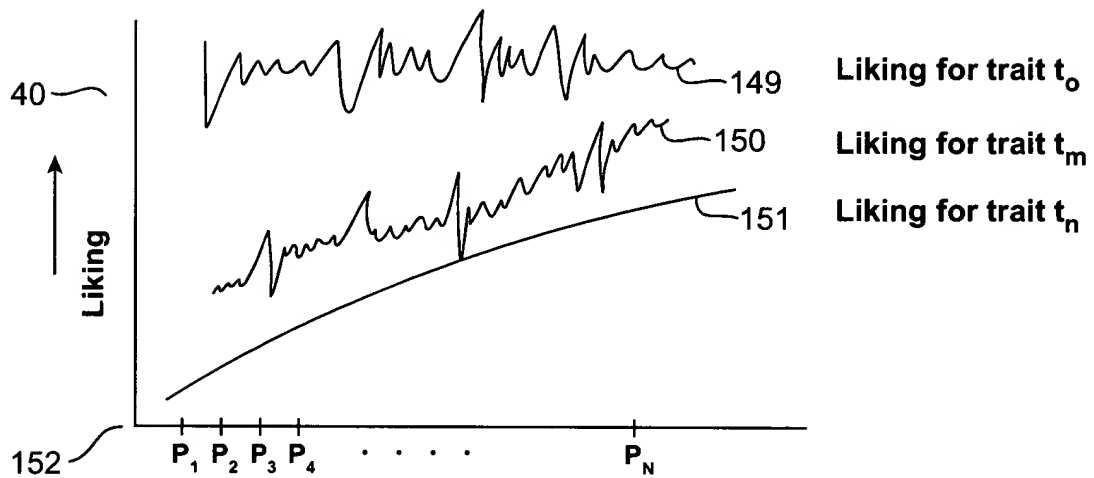
FIG. (5b)







**RECOGNIZING HIDDEN TRAITS IN PROGRAMS**



$t_m$  &  $t_n$  are correlated

$\Rightarrow t_m$  can be expressed as  $t_m = t_x + t_m'$

$t_n$  can be expressed as  $t_n = Ct_x + t_m'$

FIG. 8

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Computing Traitness of a trait is a program

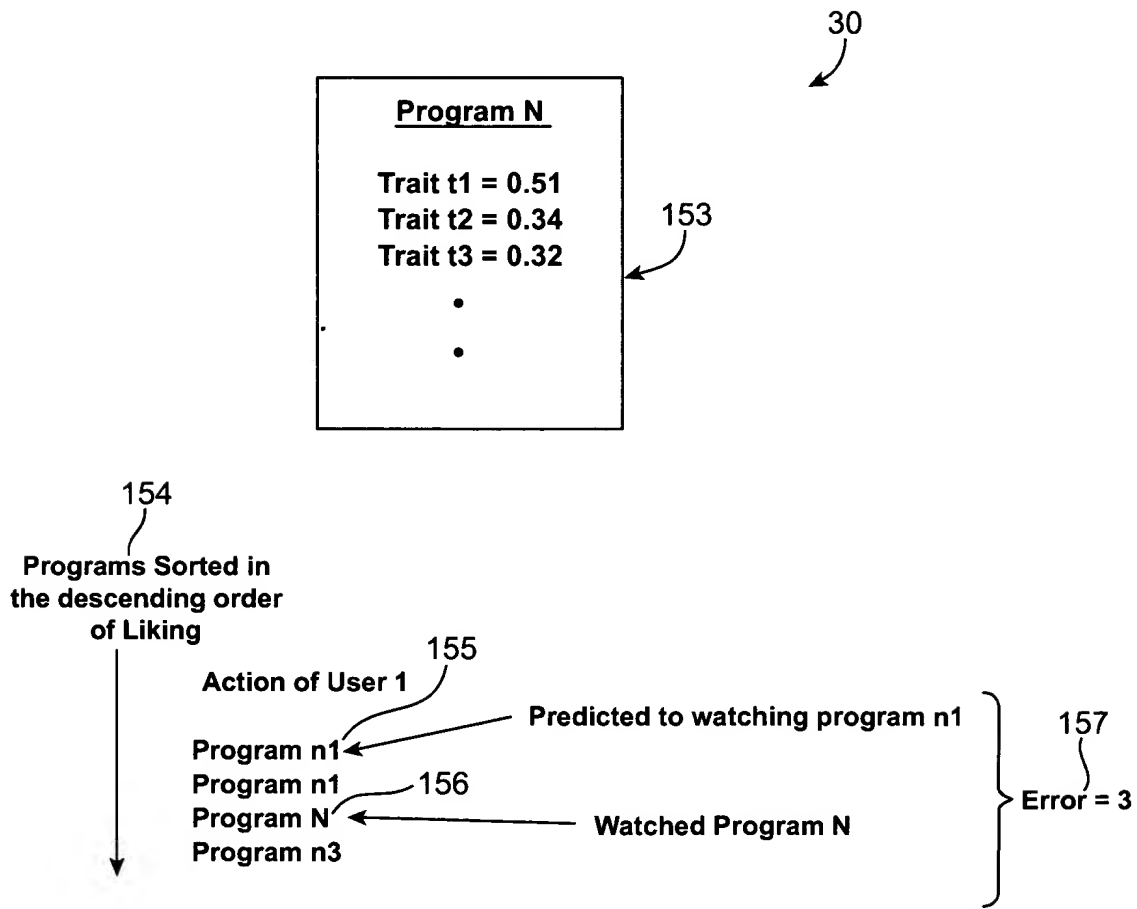


FIG. 9(a)

Computing Traitiness of a trait a program

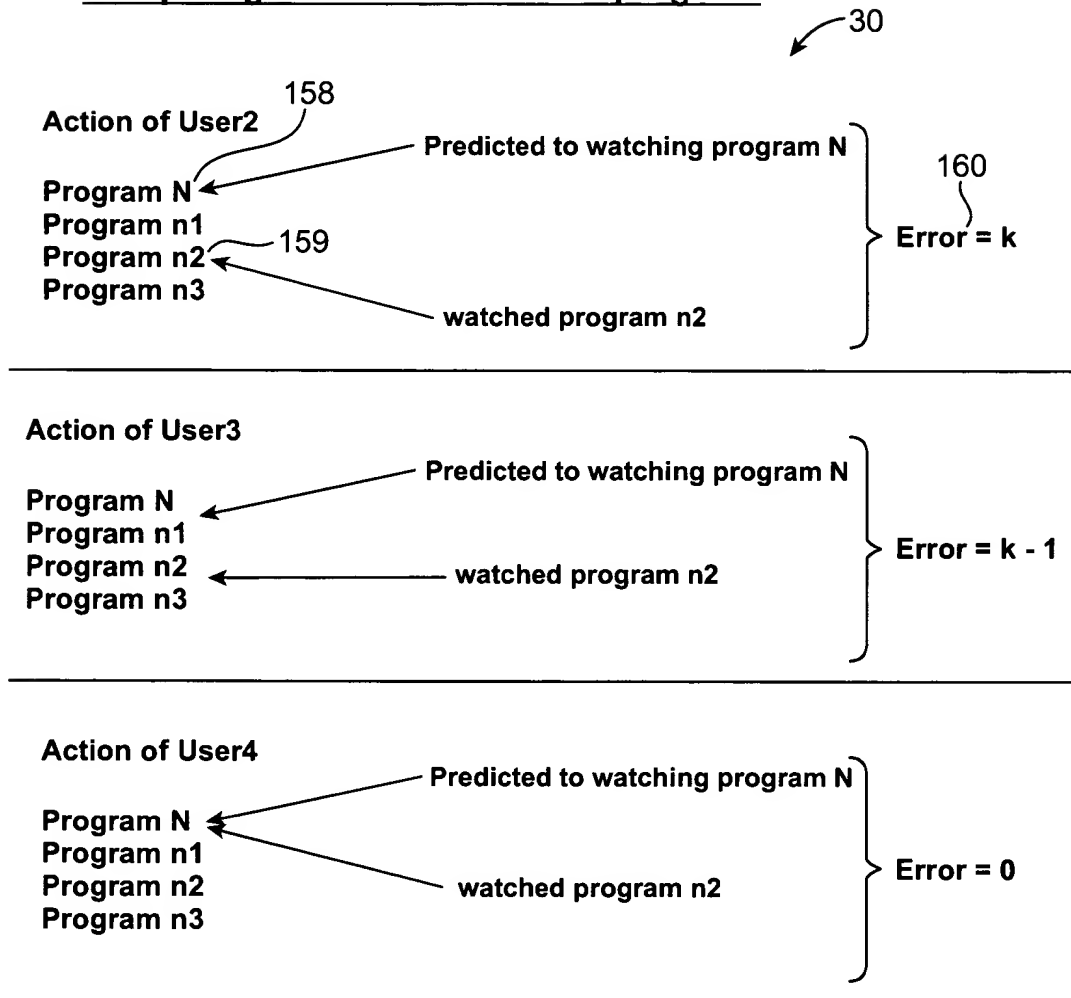


FIG. 9(b)

COMPUTING TRAITNESS OF A TRAIT IN A PROGRAM

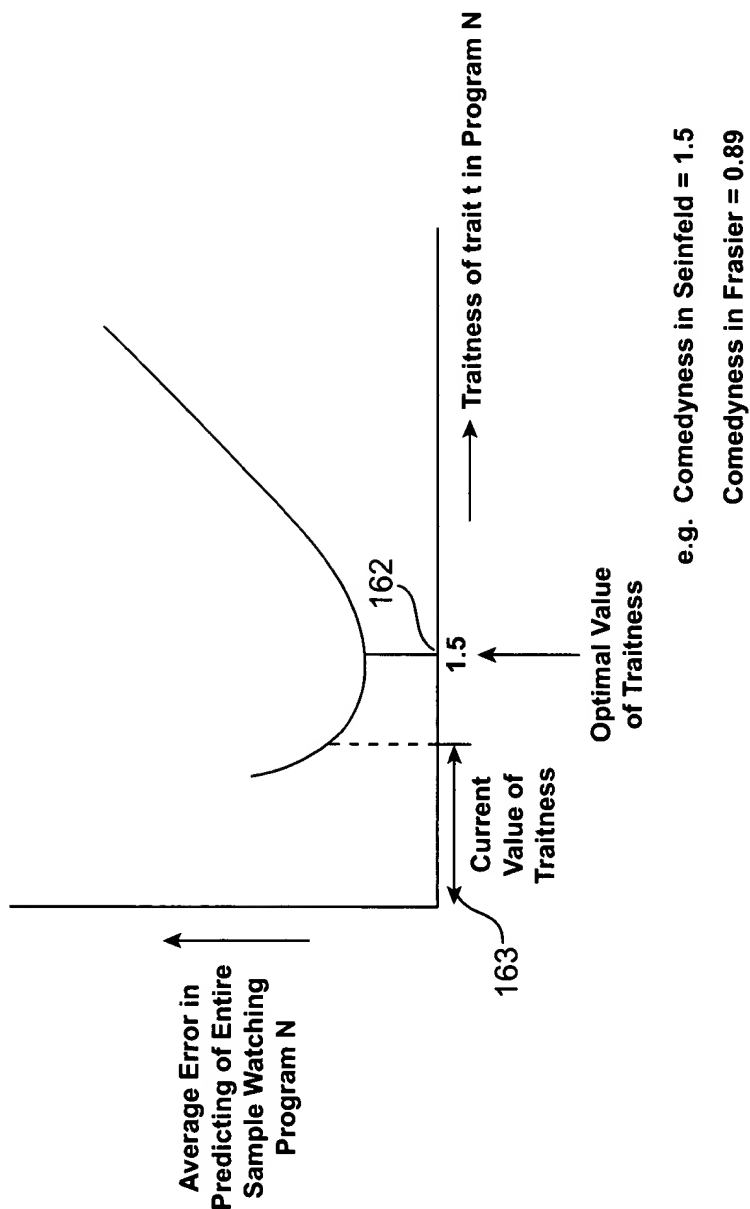


FIG. 9(c)

**Example for Liking Distribution Record format**

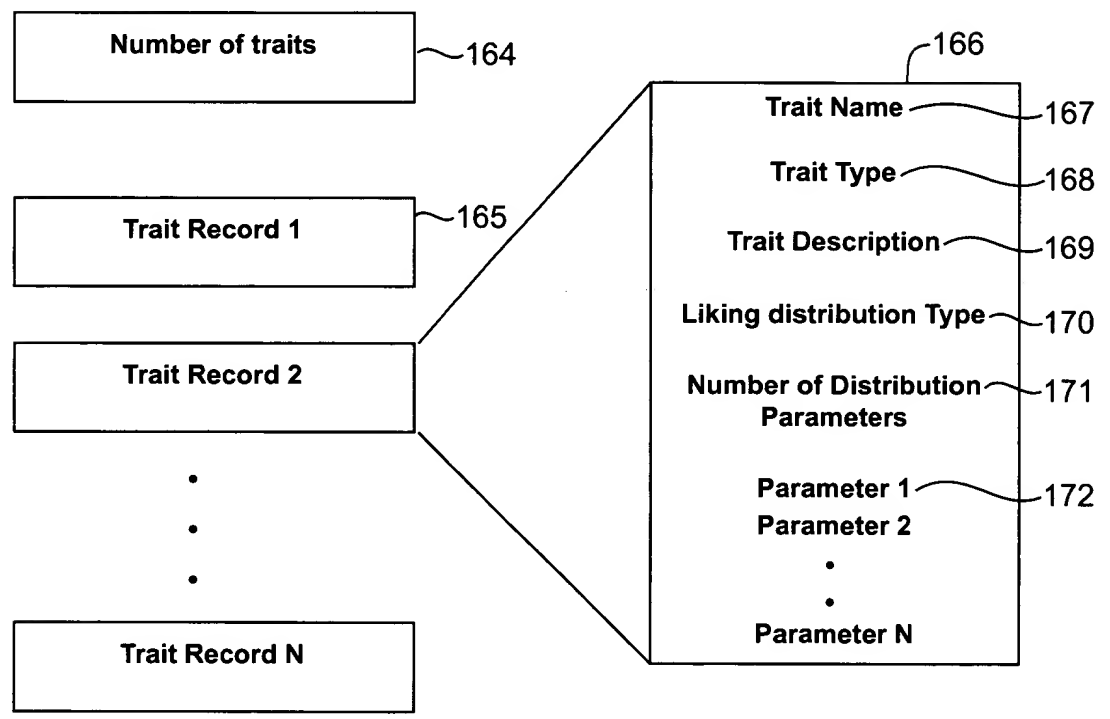


FIG. 10

**Some Sample Values For Fields in trait Record**

**Trait type**

Static  
dynamic  
Association  
Generated

**Trait Description**

(NBC, "NEWS"),  
SUBSTRING("CIA") IN DESC.  
TITLE

**Distribution**

Normal  
Exponential  
Defined type 1  
Defined type 2

**Distribution Parameters**

Mean = 13, Deviation = 2

FIG. 11

**Example for Traitness of recurring Programs**

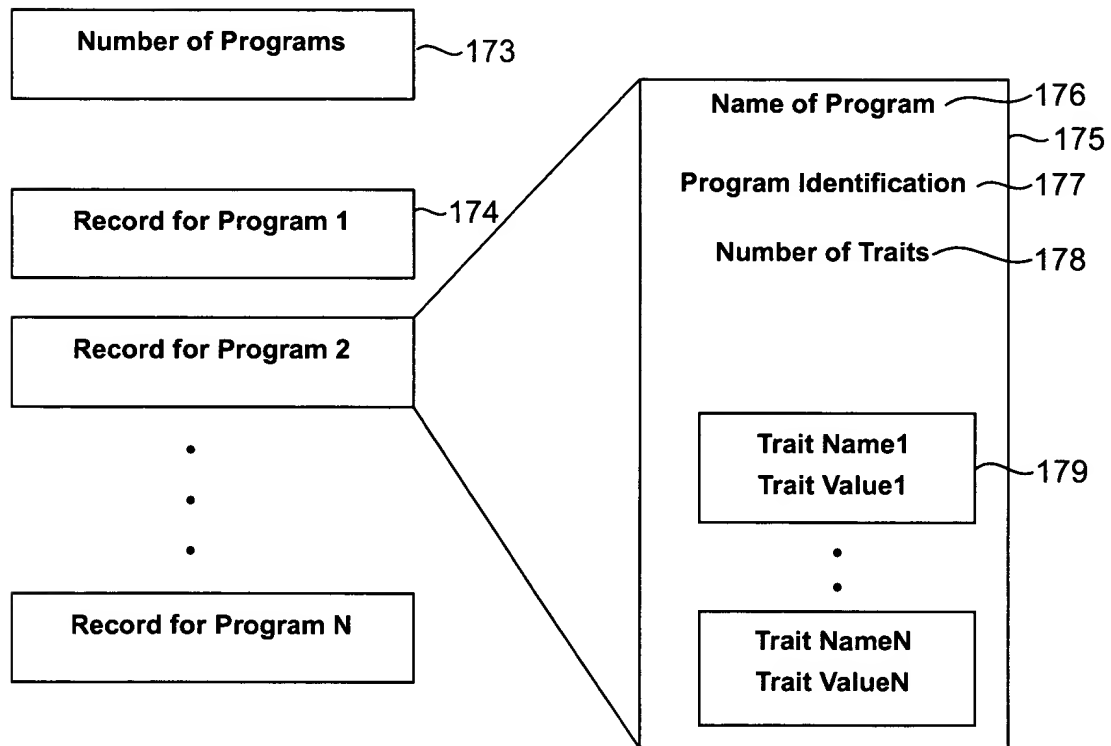


FIG. 12

**Example For Broadcsting traitness as a part of EPG Data**

**Program Info**

**Seinfeld,**

**NBC,**

**Comedy = 0.07**

**sitcom,**

**Dynamic trait 1 = 0.1**

**.**

**.**

**Actor = Seinfeld**

**FIG. 13**



Example for Selection Record

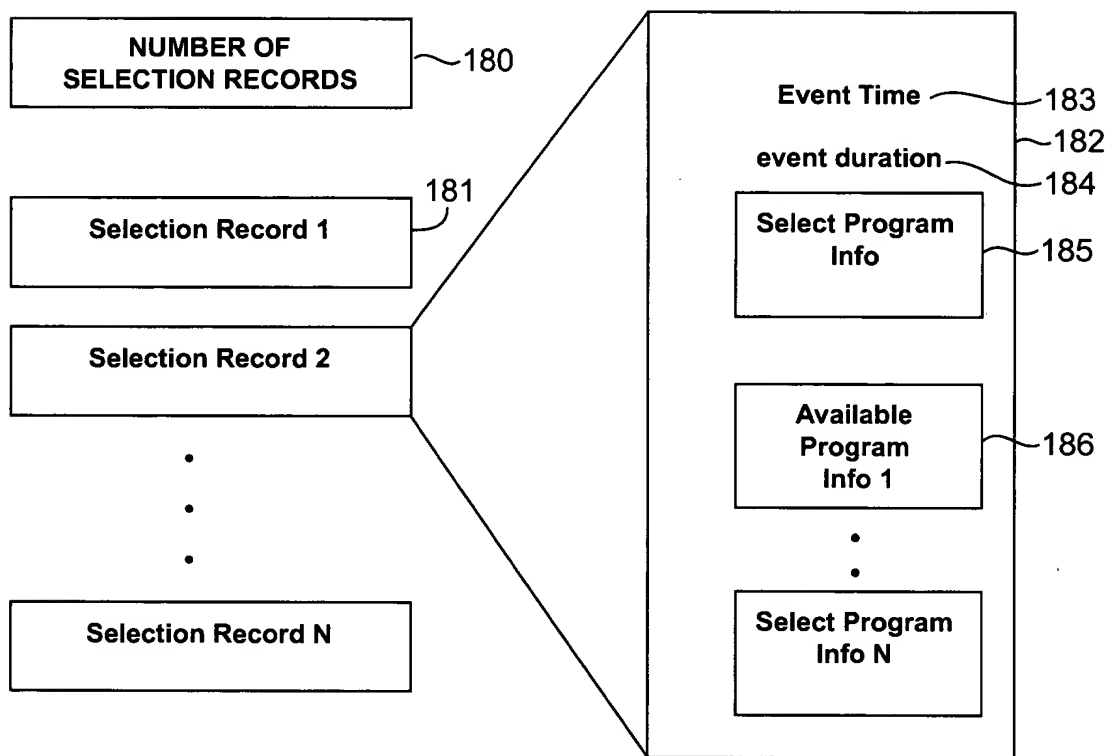


FIG. 14

Generation of User Selection History

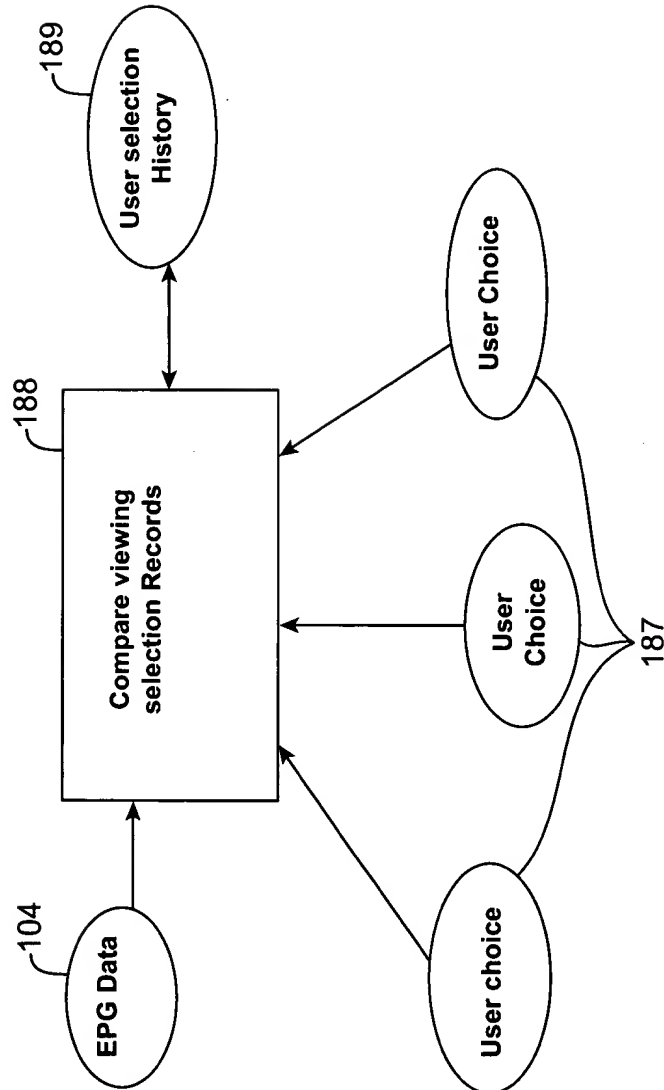


FIG. 15

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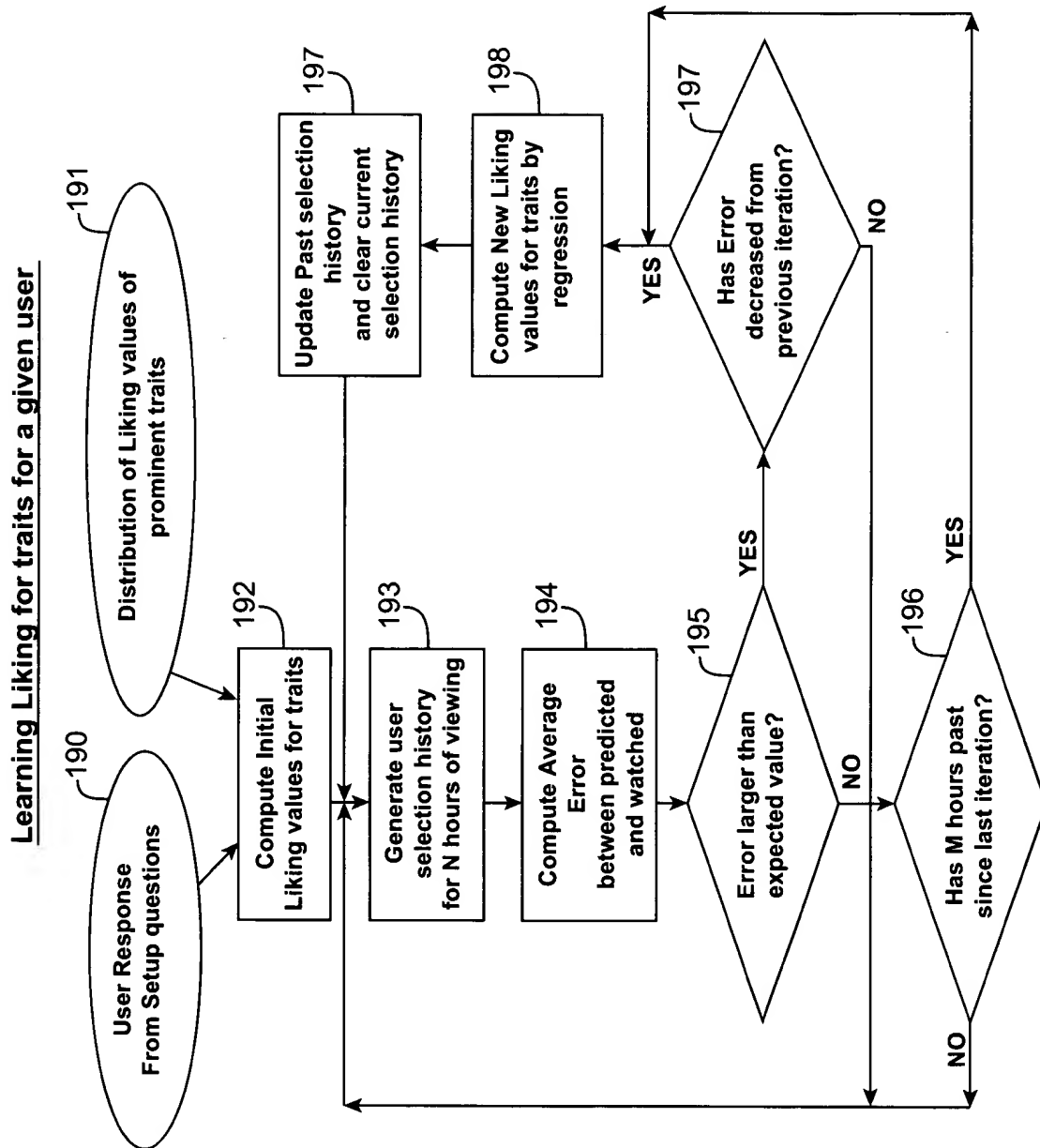


FIG. 16

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**Computing Relevance**

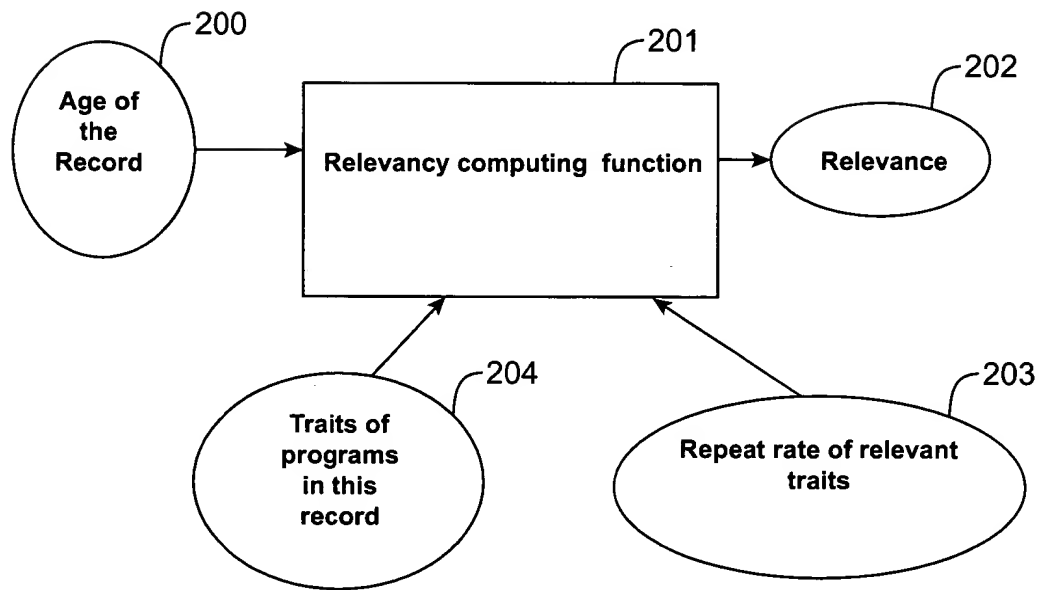


FIG. 17(a)

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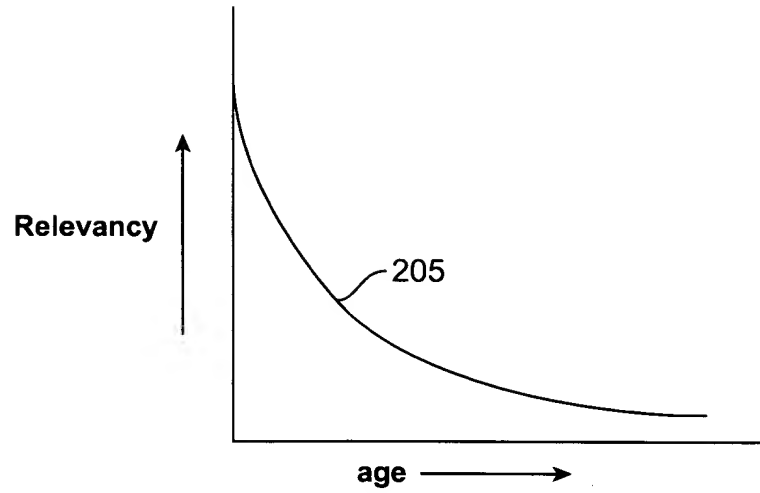


FIG. 17(b)

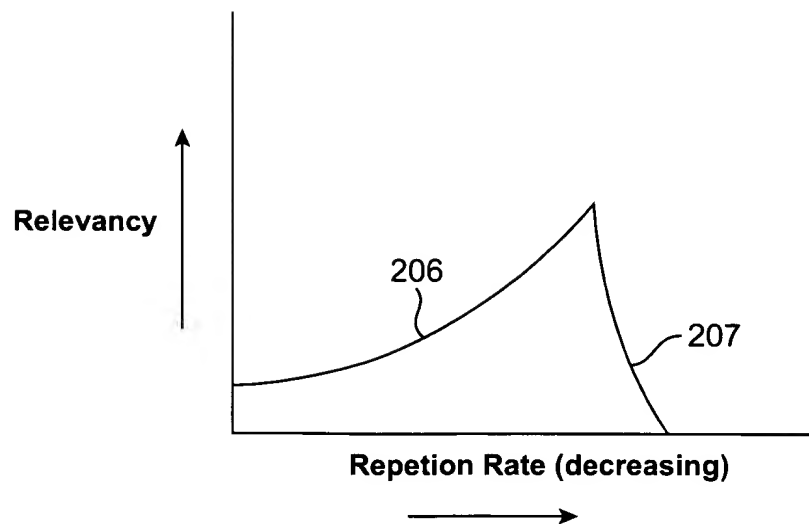


FIG. 17(c)

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Updation of past History

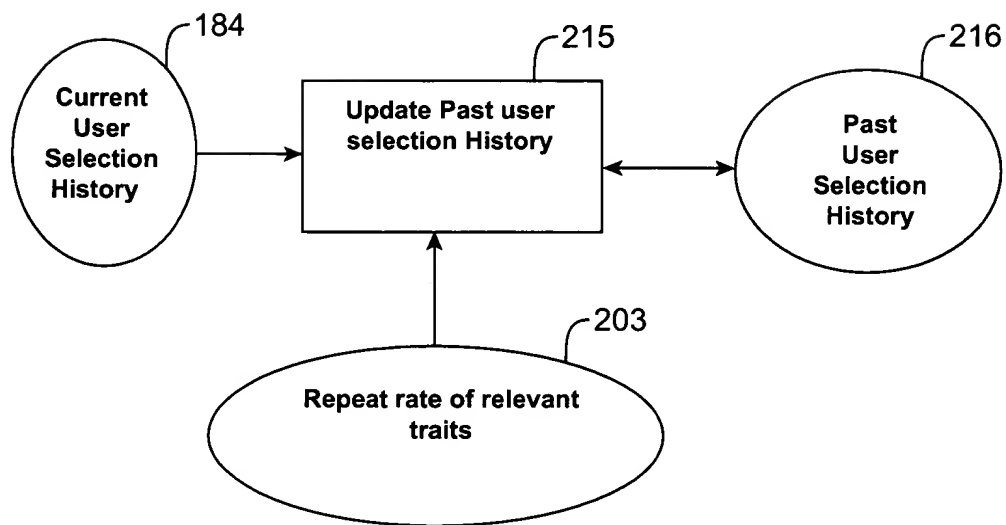


FIG. 18(a)

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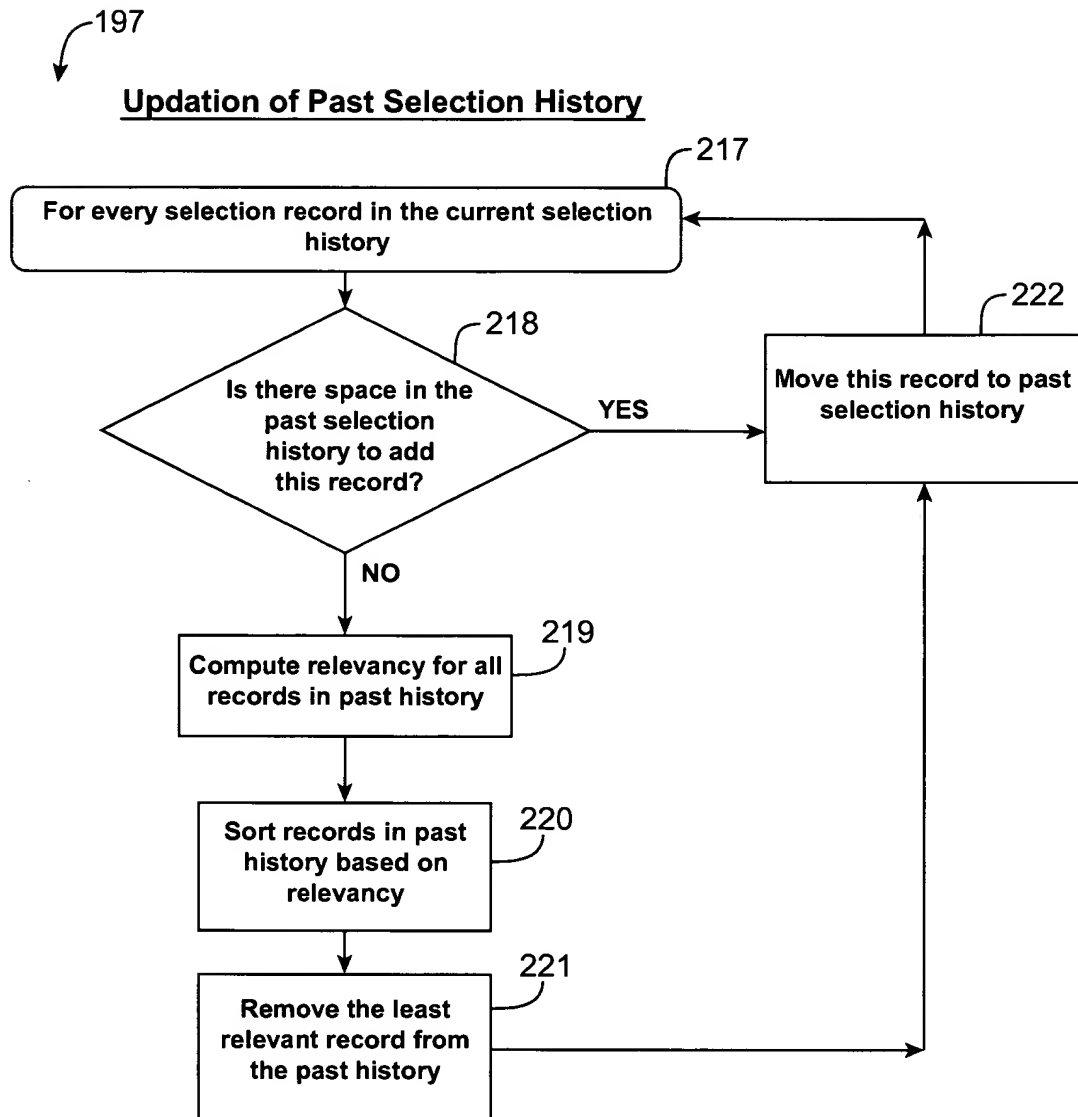


FIG. 18(b)

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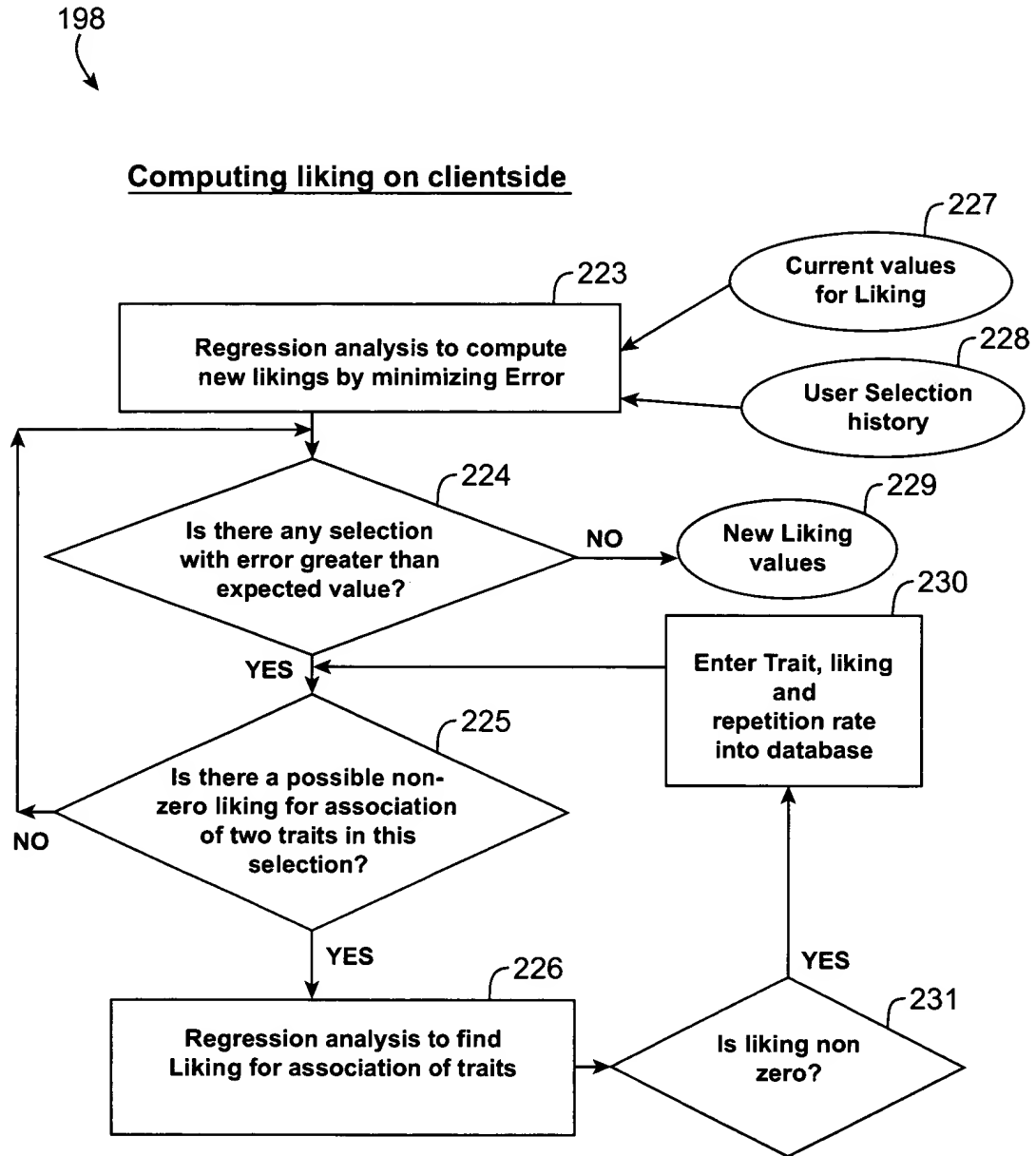


FIG. 19



Computing scores for programs for future predictions

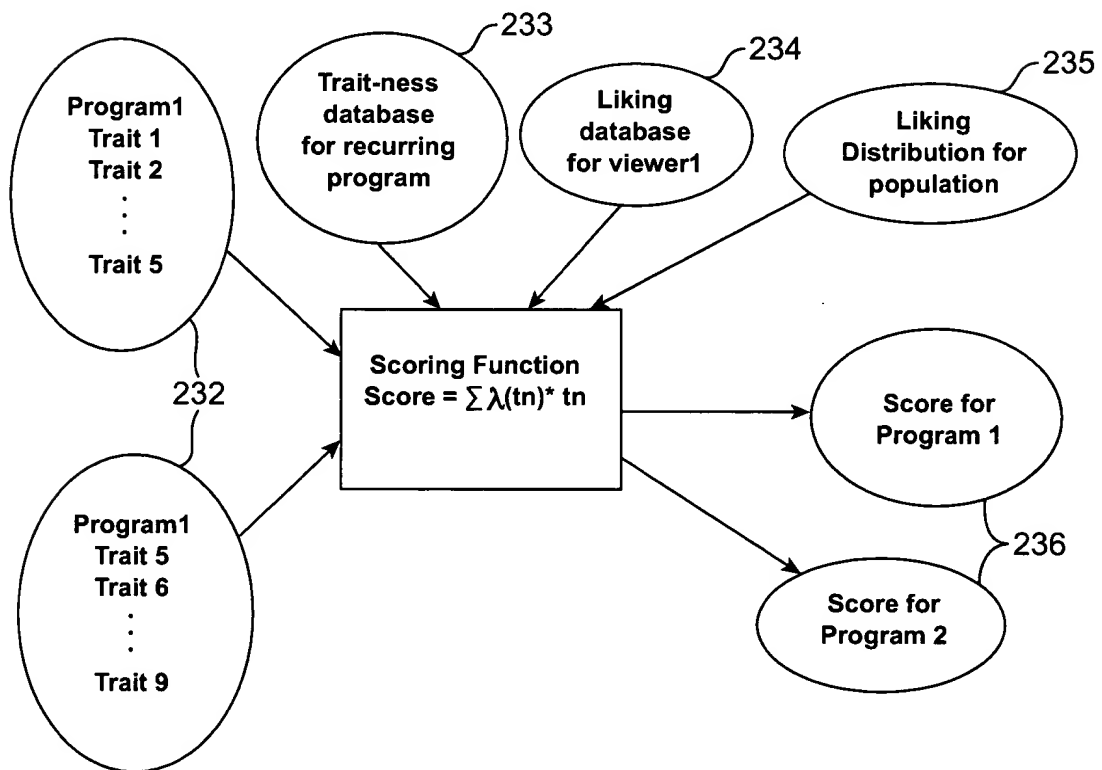


FIG. 20

Distribution of Income in Sample

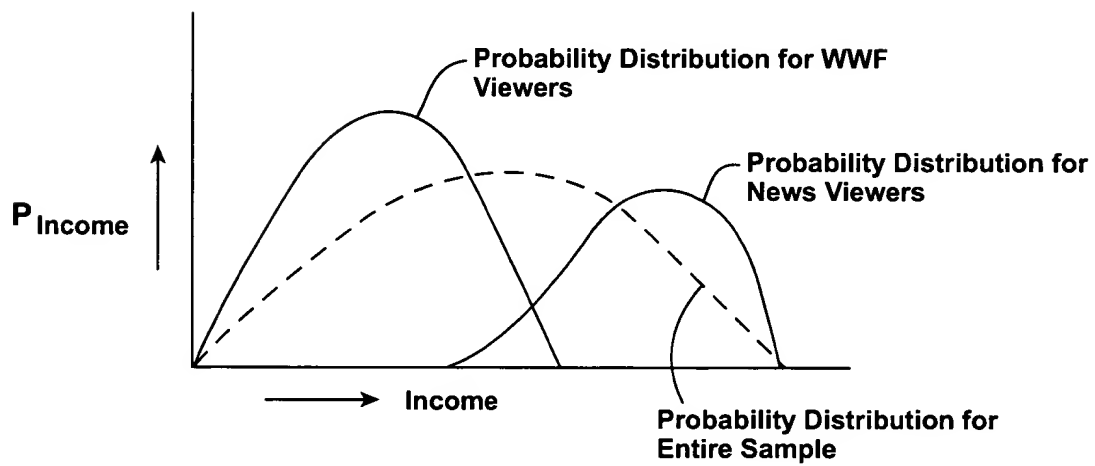
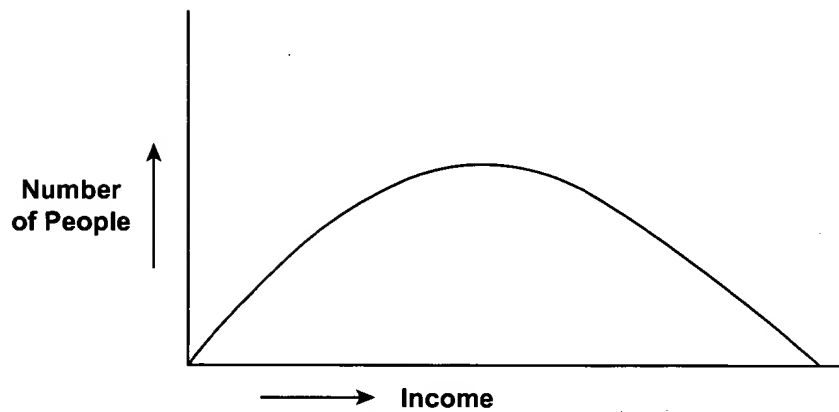


FIG. 21(a)

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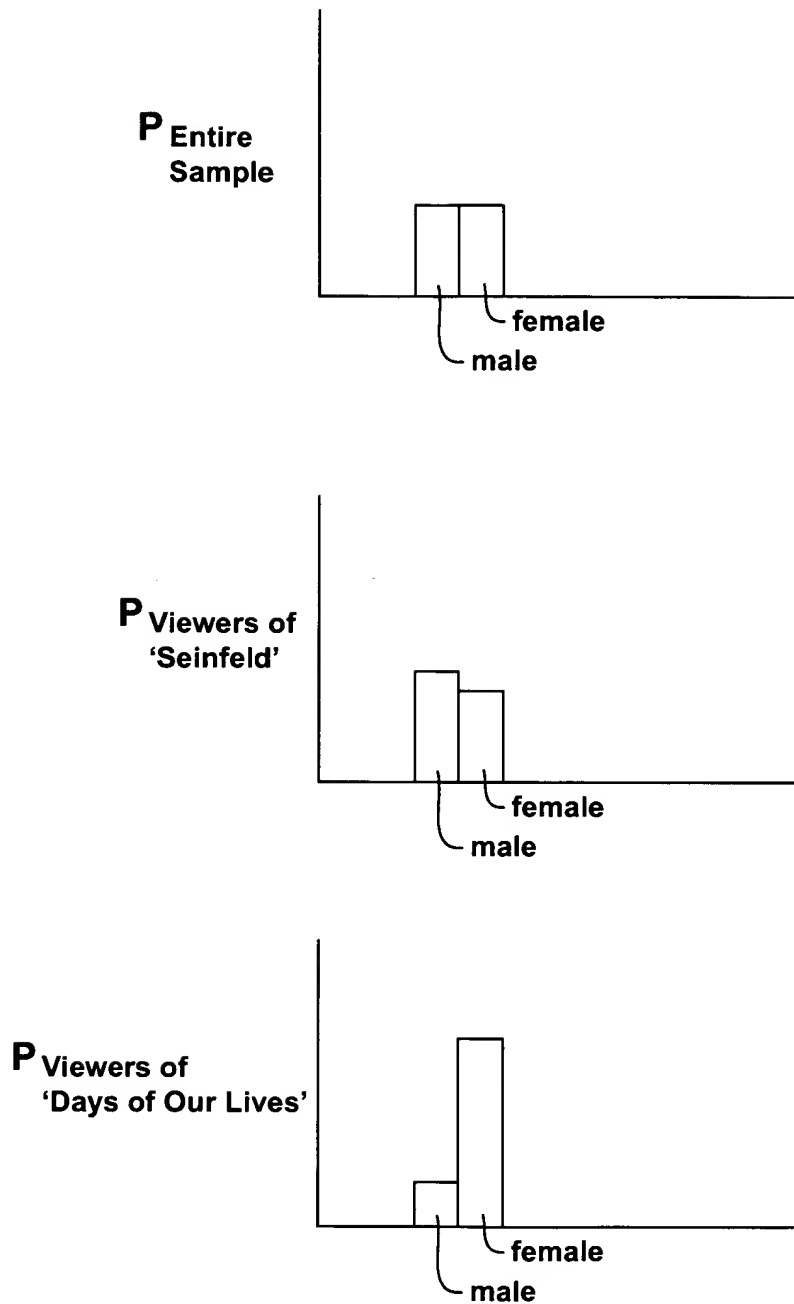


FIG. 21(b)

**SYSTEM ARCHITECTURE**

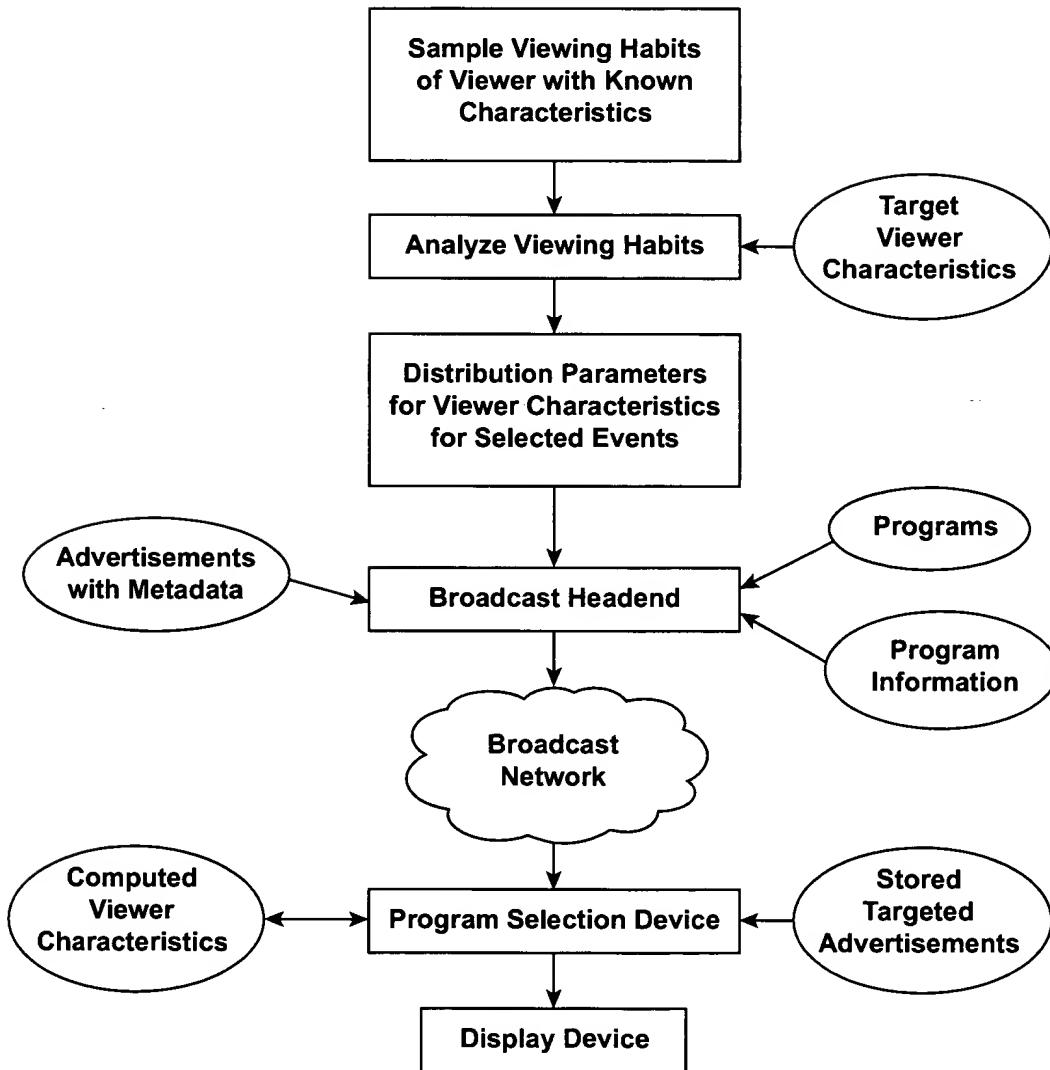


FIG. 22

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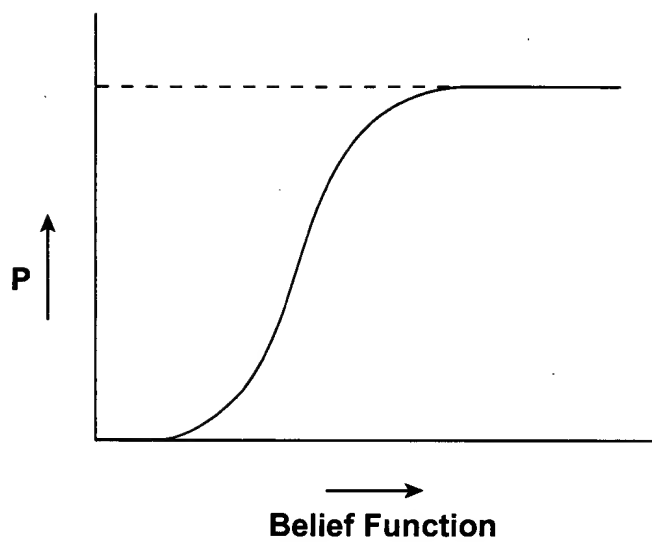


FIG. 23a

**Demographic Trait Record format**

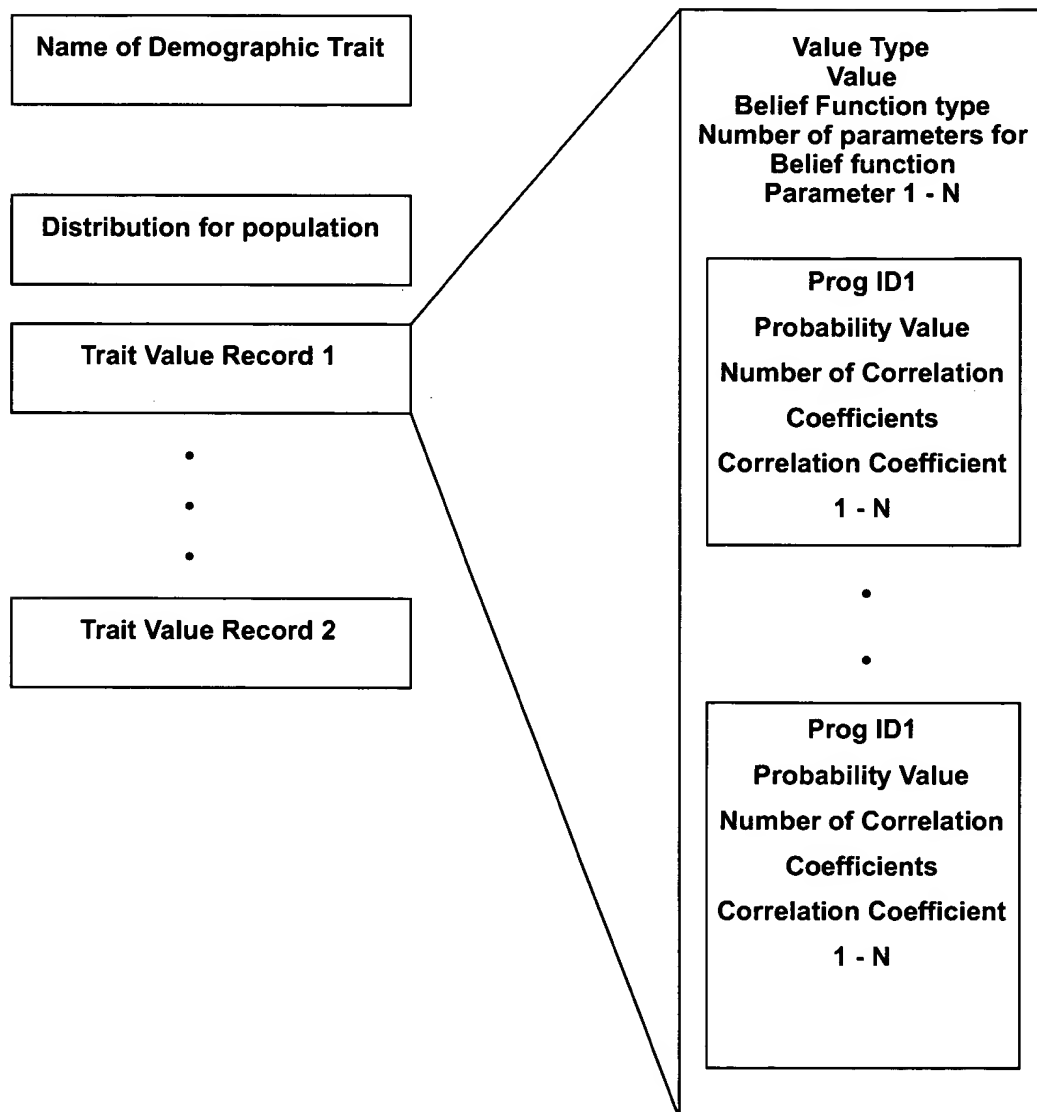


FIG. 23b

**Advertisement Targeting Record format**

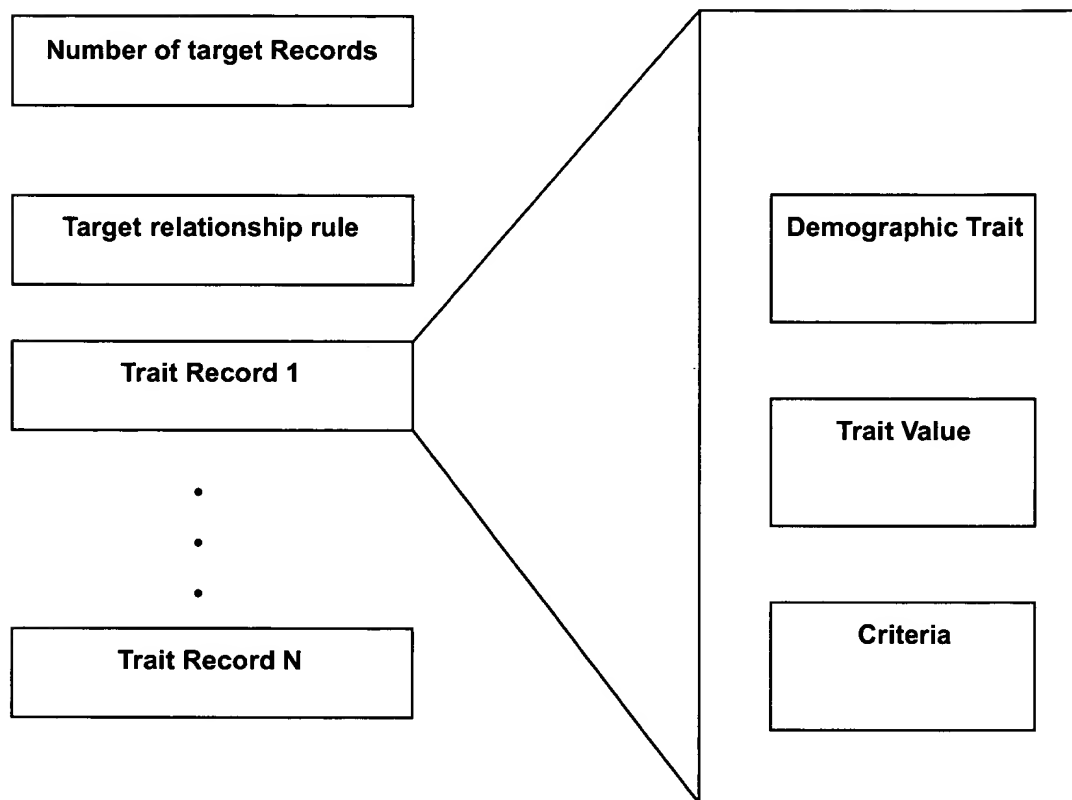


FIG. 23c

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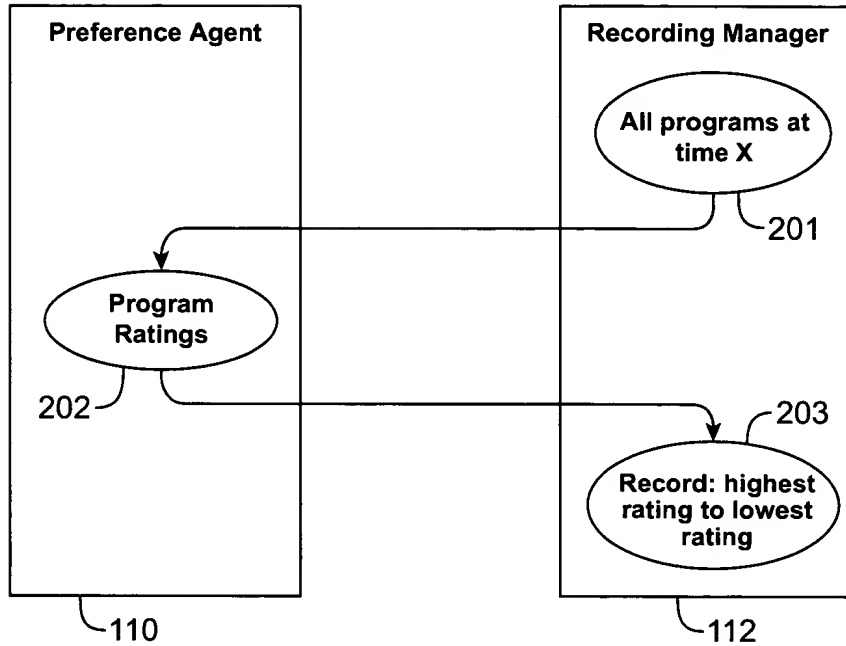


FIG. 24

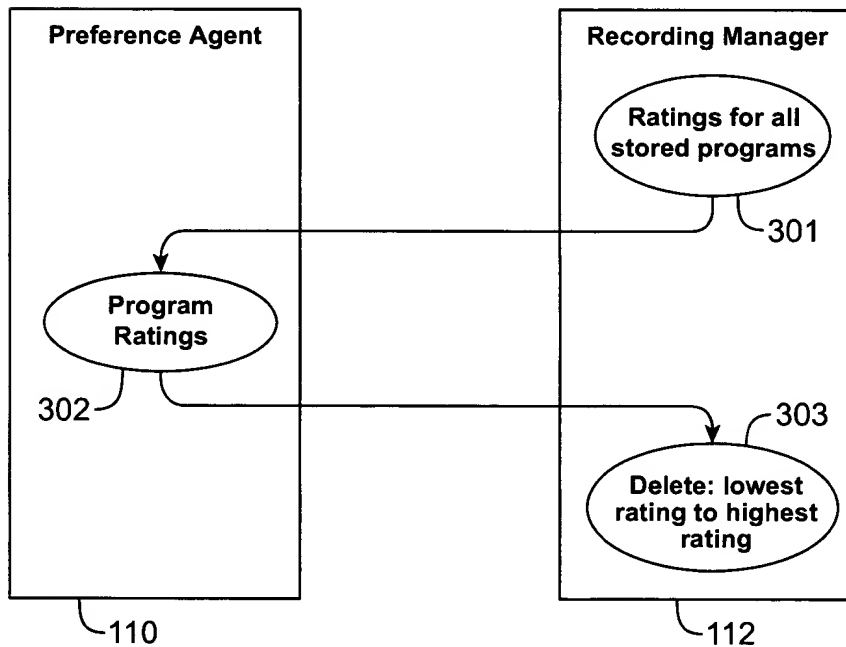


FIG. 25



+

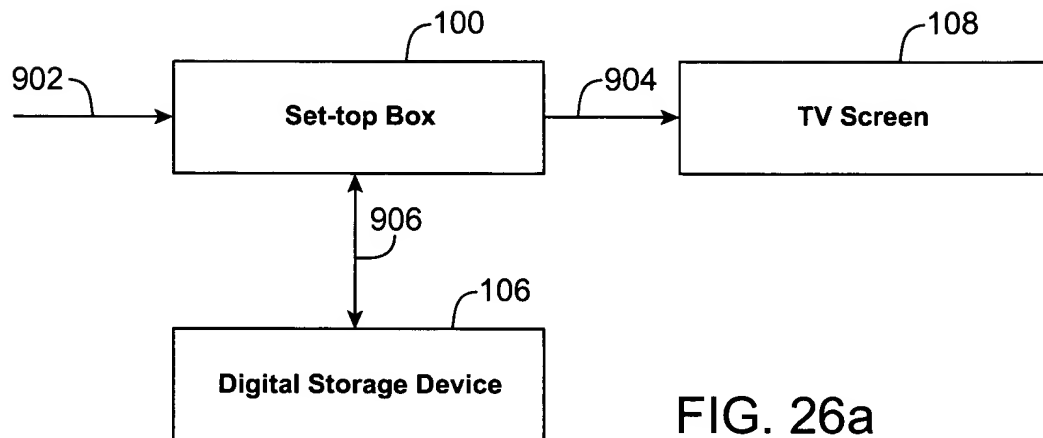


FIG. 26a

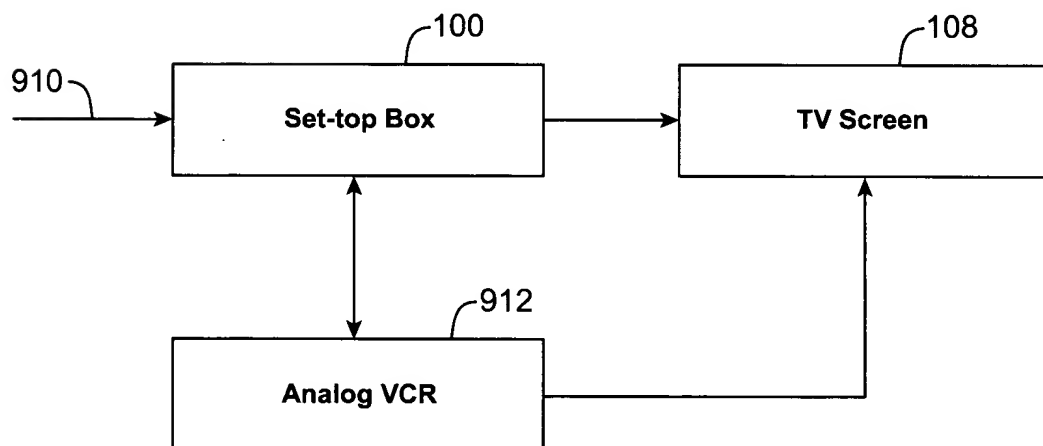


FIG. 26b

+

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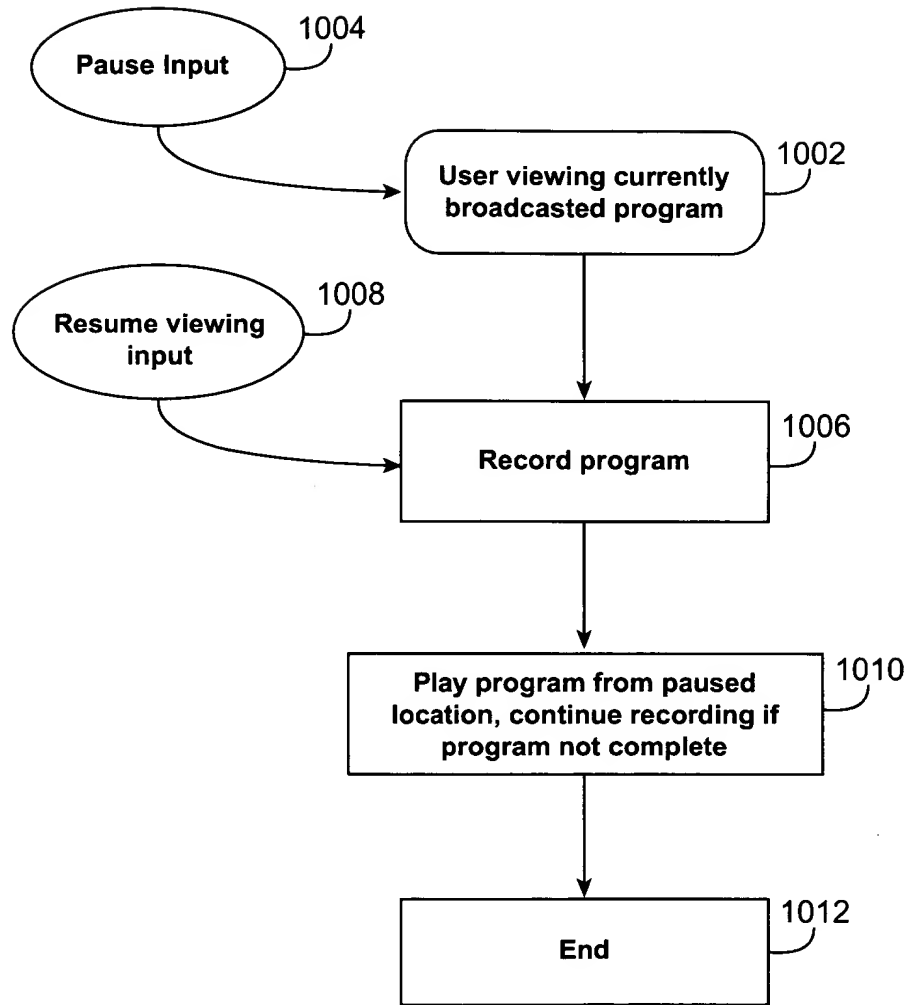


FIG. 27

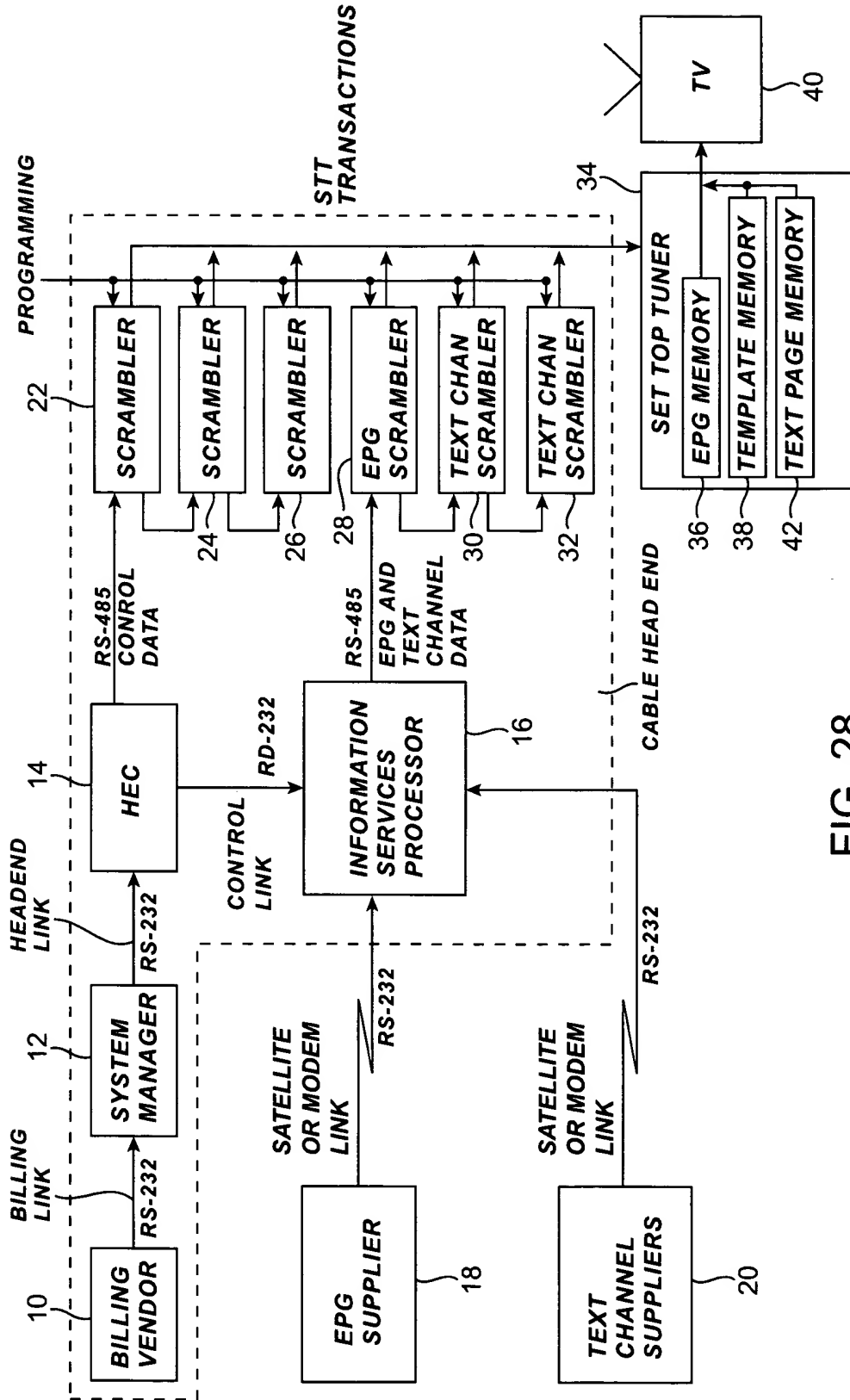


FIG. 28

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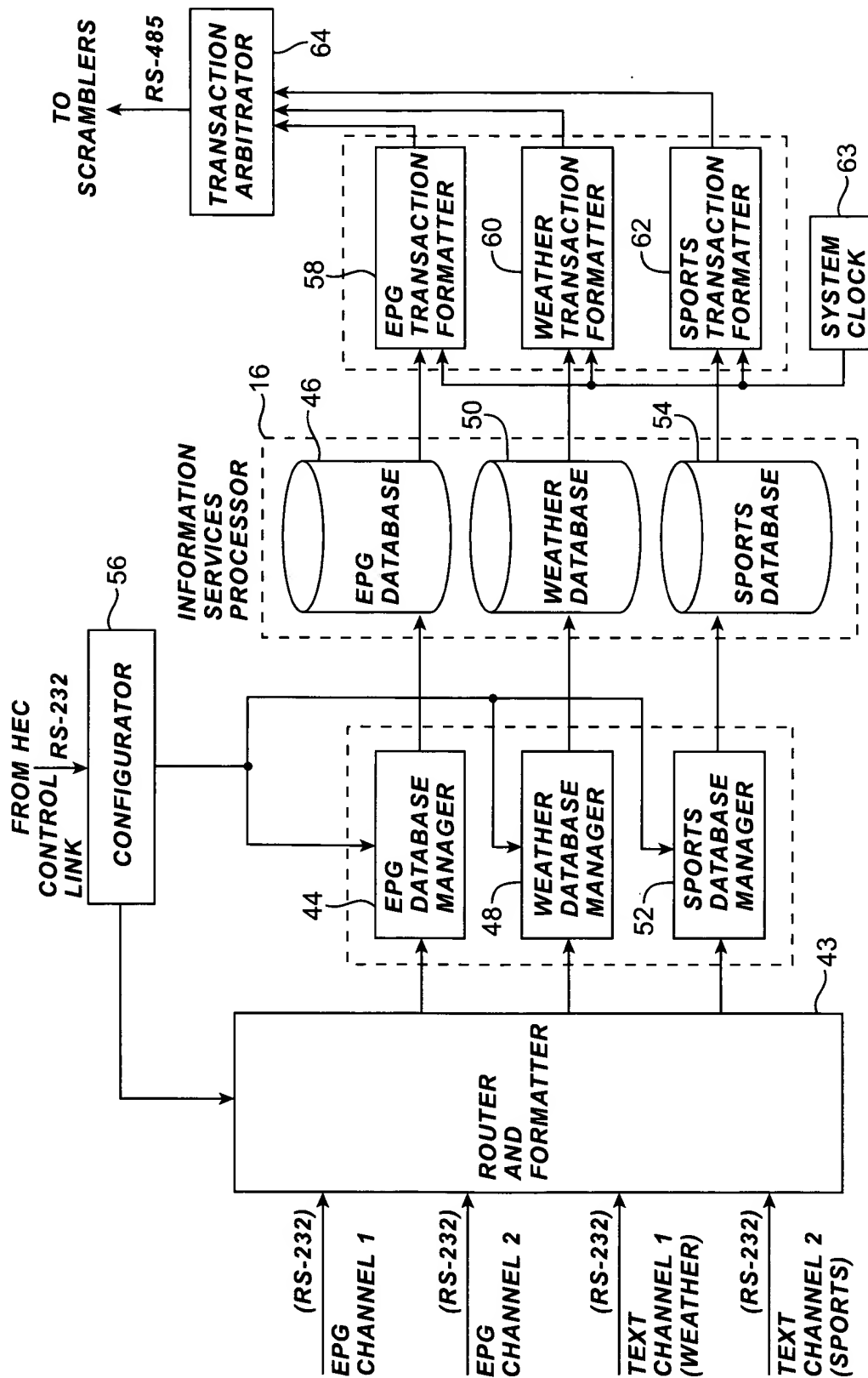


FIG. 29

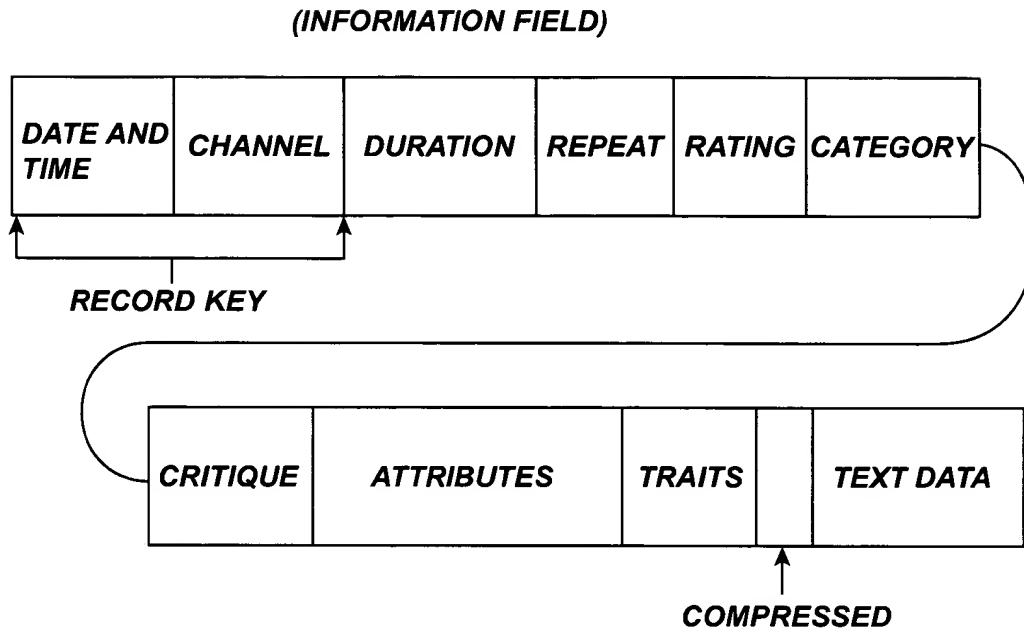


FIG. 30

**(TO SCRAMBLERS)**

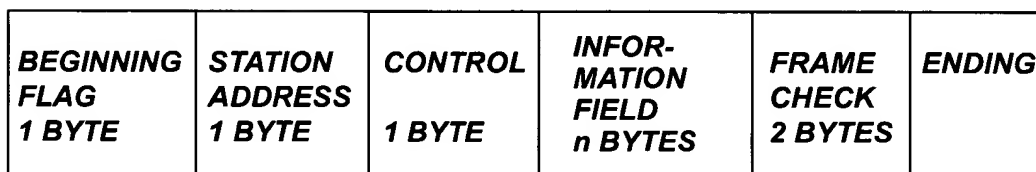
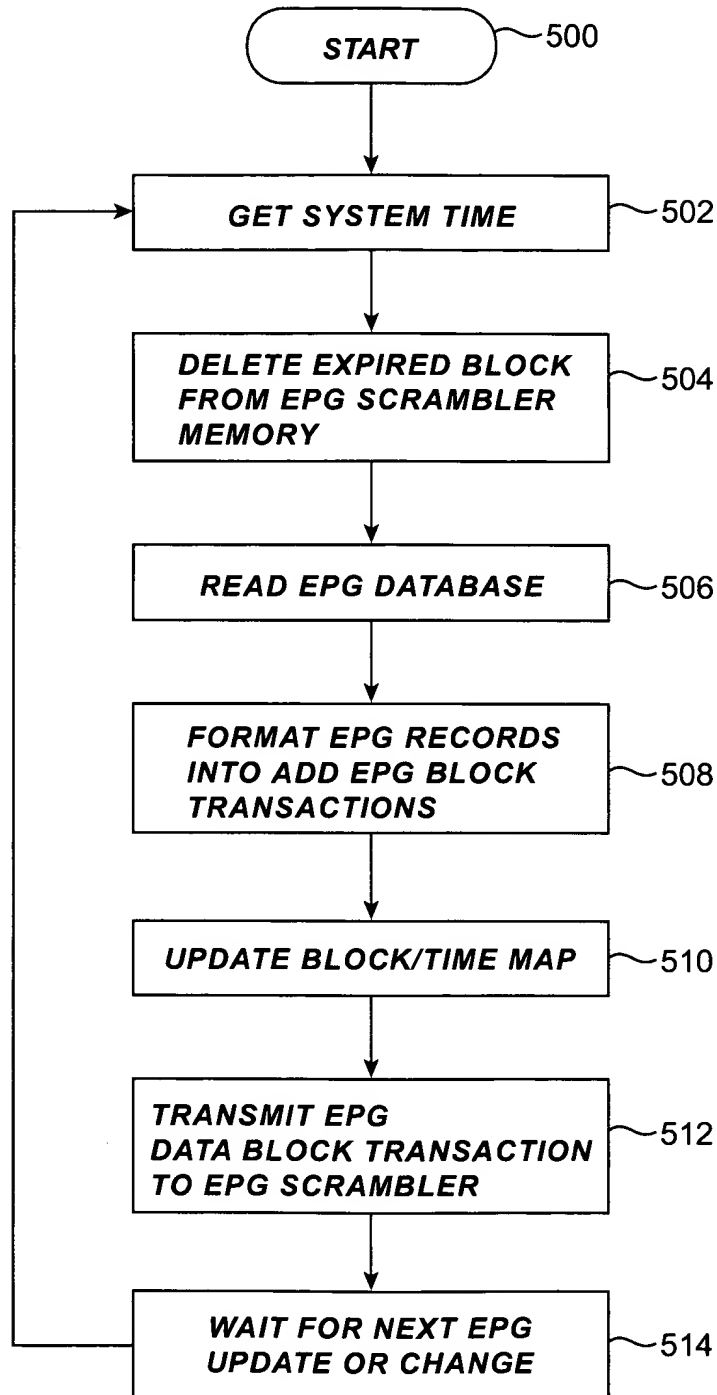


FIG. 31

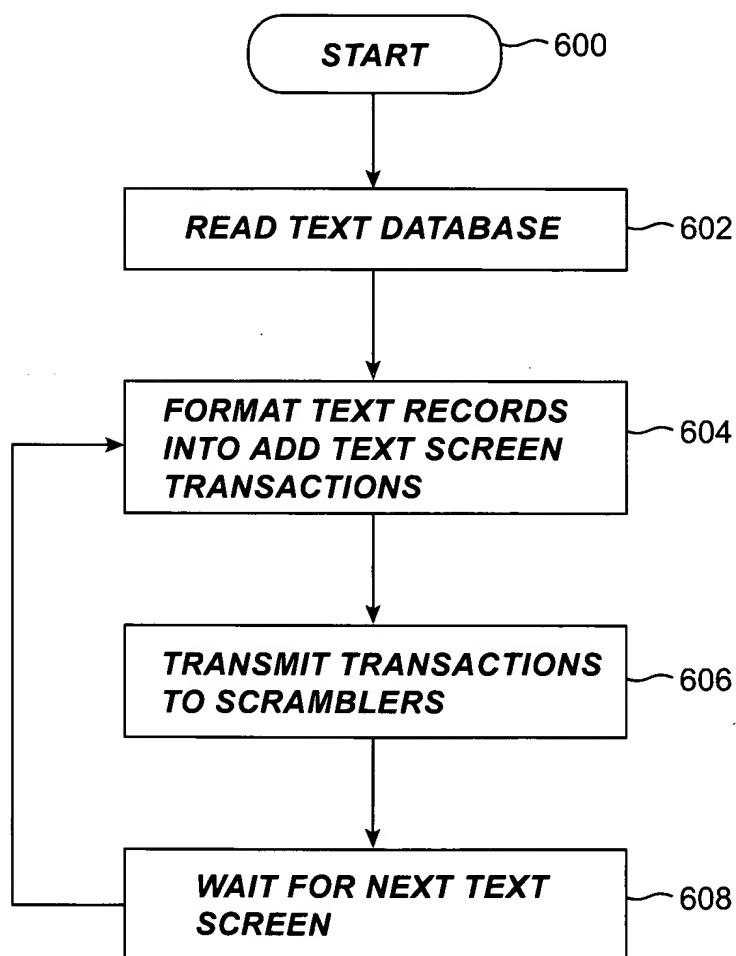
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**EPG TRANSACTION FORMATTER 58**



**FIG. 32**

**TEXT CHANNEL TRANSACTION FORMATTER 60,62**



**FIG. 33**

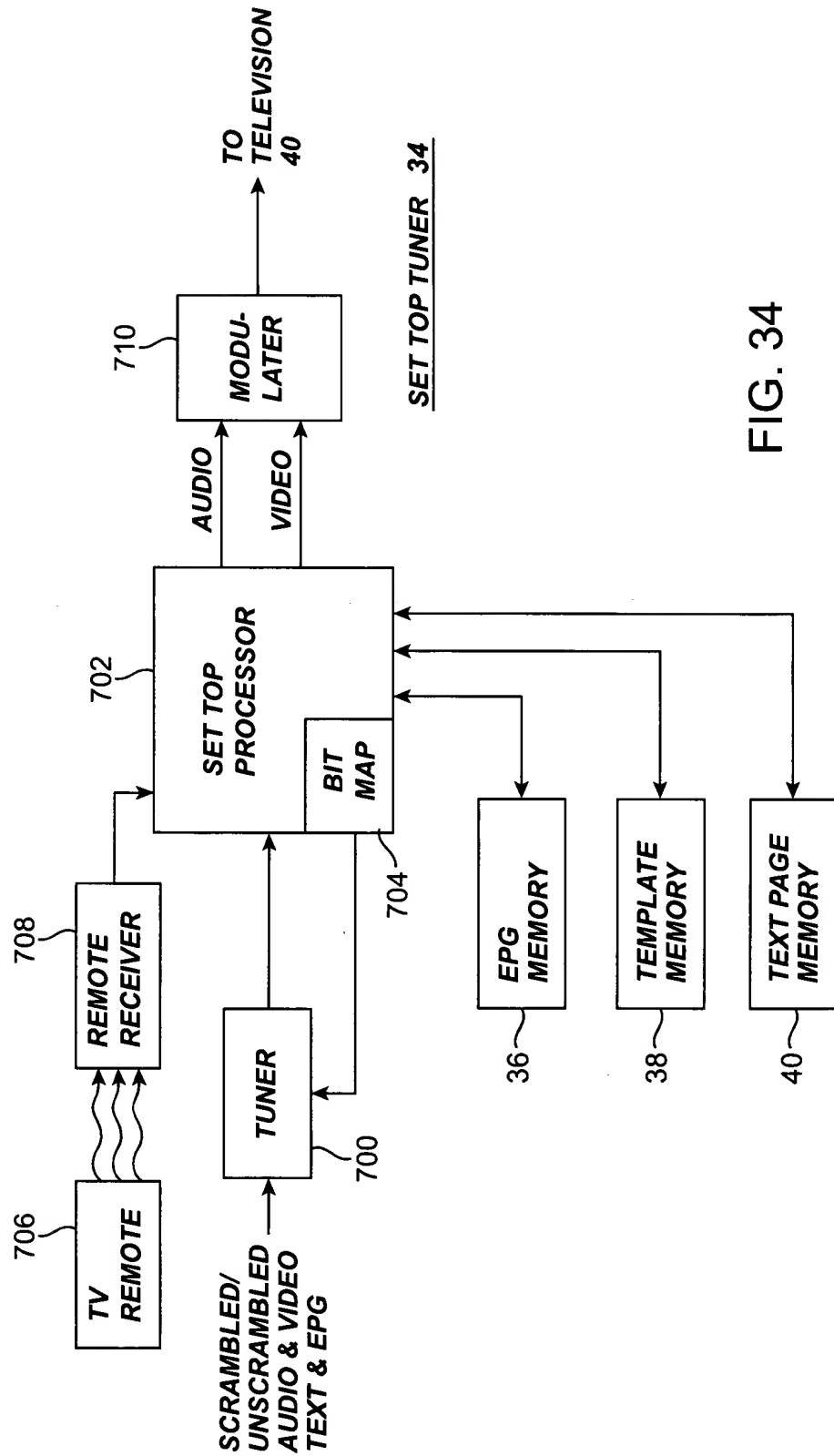


FIG. 34



**Process for automatically creating multiple profiles and  
automatically identifying currently active profiles**

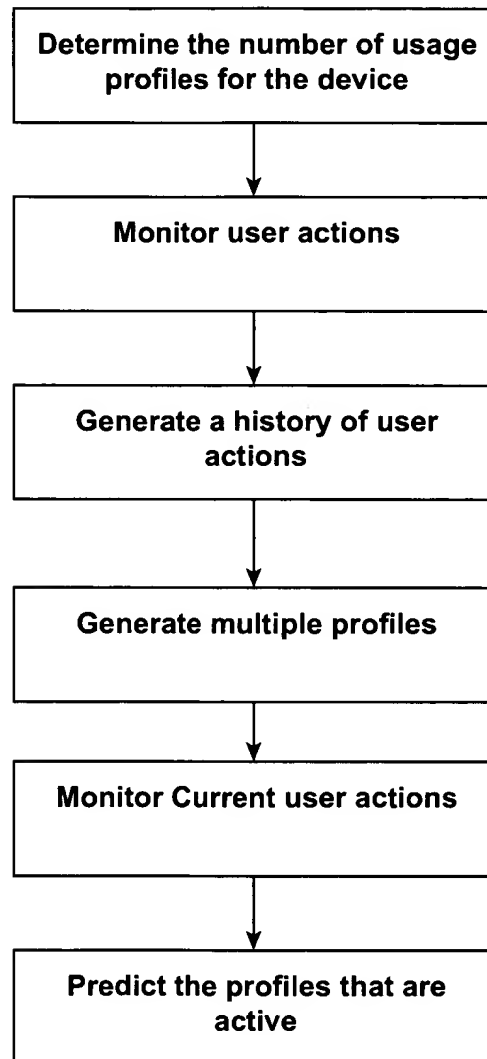


FIG. 35

**Process for generating multiple profiles**

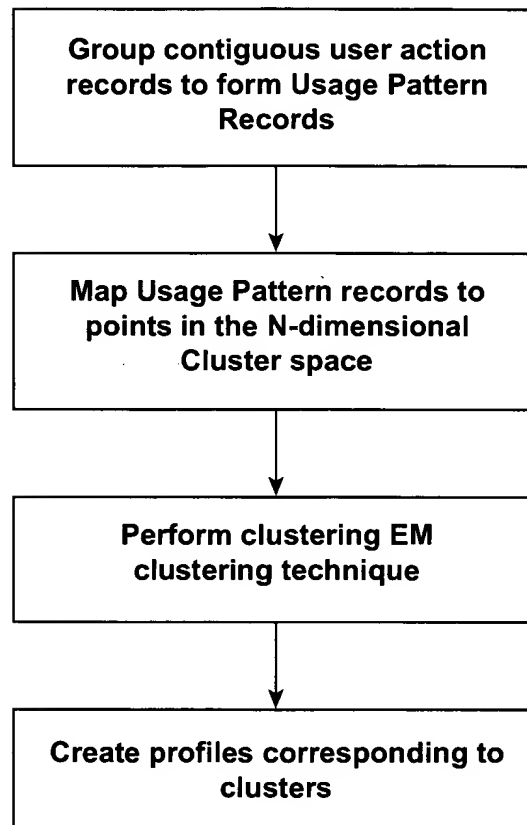


FIG. 36

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<b>Action</b> <b>Start Time</b> <b>End Time</b> <b>Parameters</b>
--

B) Format of user action record

<b>Channel Change</b> <b>38720100</b> <b>38720110</b> <b>NBC</b>
---

B) Example of user action record

<b>Number of Action records</b>
<b>Action record 1</b>
<b>Action record 2</b>

.

.

<b>Action record N</b>
------------------------

C) Format of History database

<b>Number of Action records</b>
<b>Action record 1</b>
<b>Action record 2</b>

.

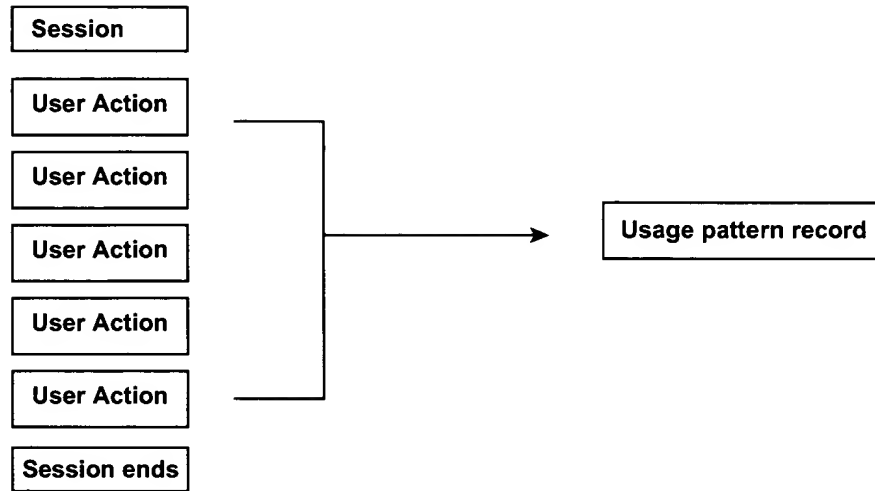
.

<b>Action record N</b>
------------------------

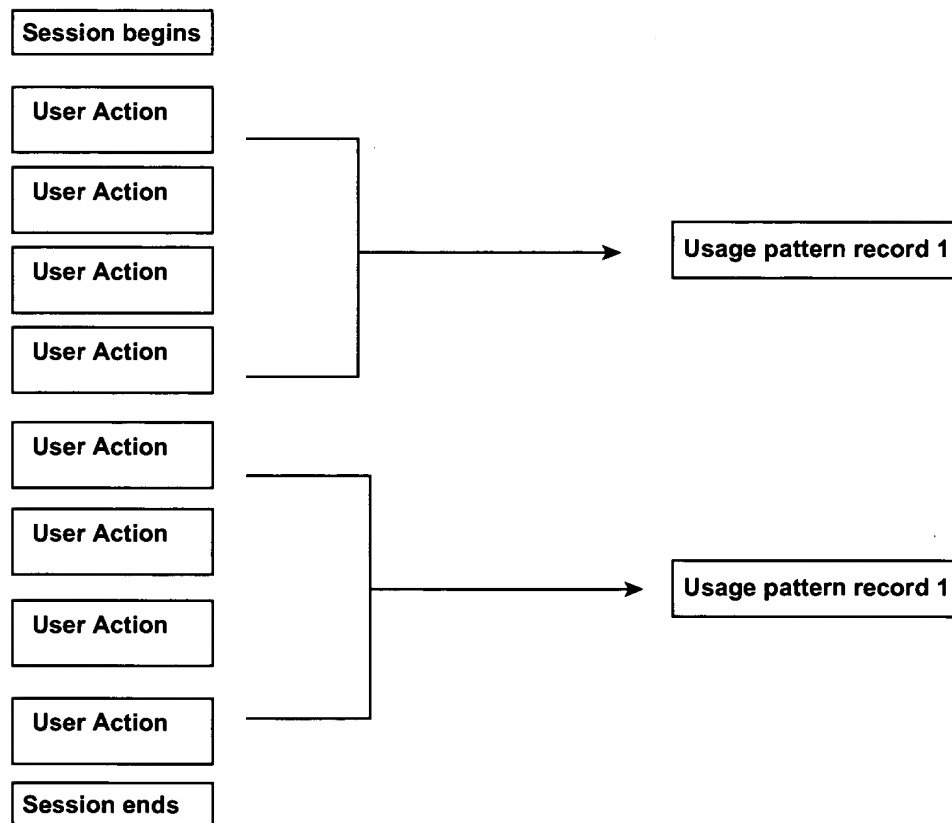
D) Format of Usage pattern record

FIG. 37

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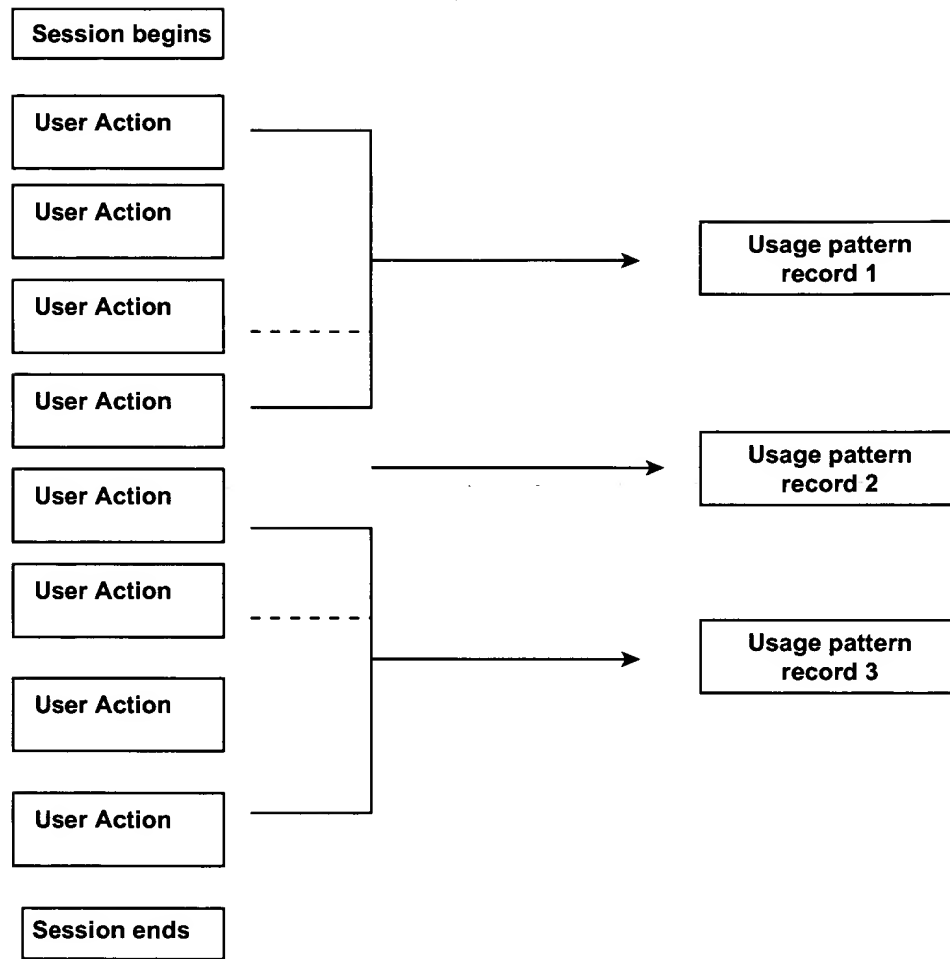
A) One method for creating usage pattern



B) One method for creating usage pattern

FIG. 38

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One method for creating usage pattern record

FIG. 39

**Process for Predicting currently active profiles**

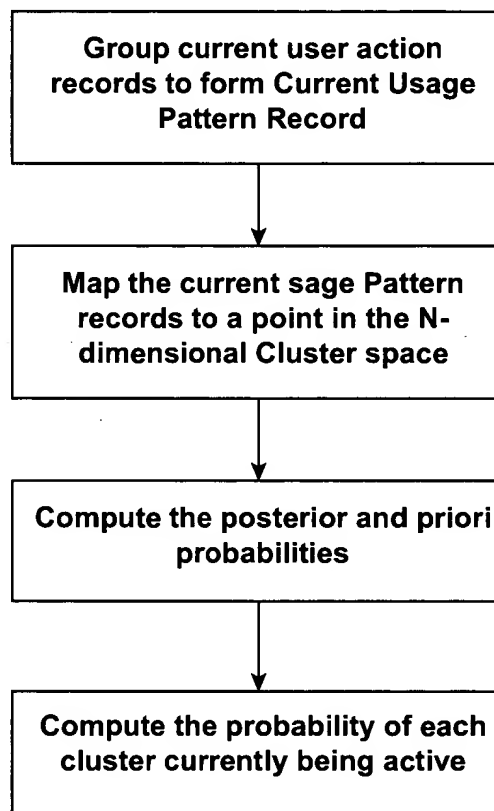
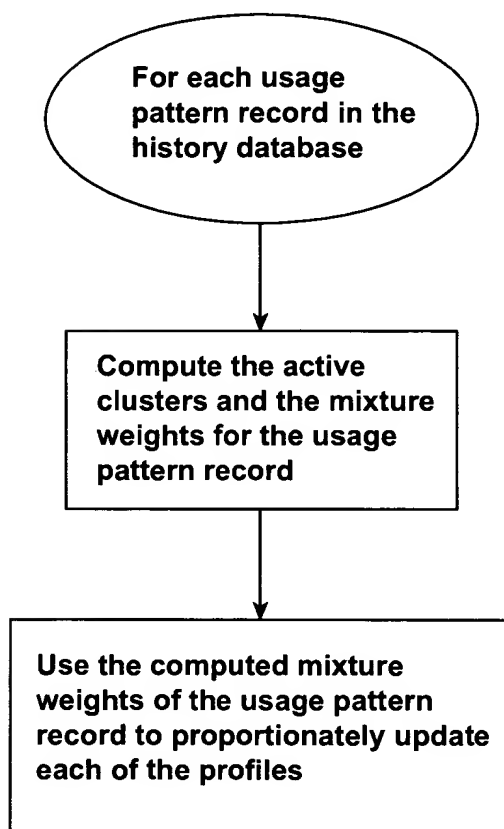


FIG. 40

**Profile Creation using Generated Clusters**



**FIG. 41**

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Targeted Electronic Content Distribution without compromising privacy of users

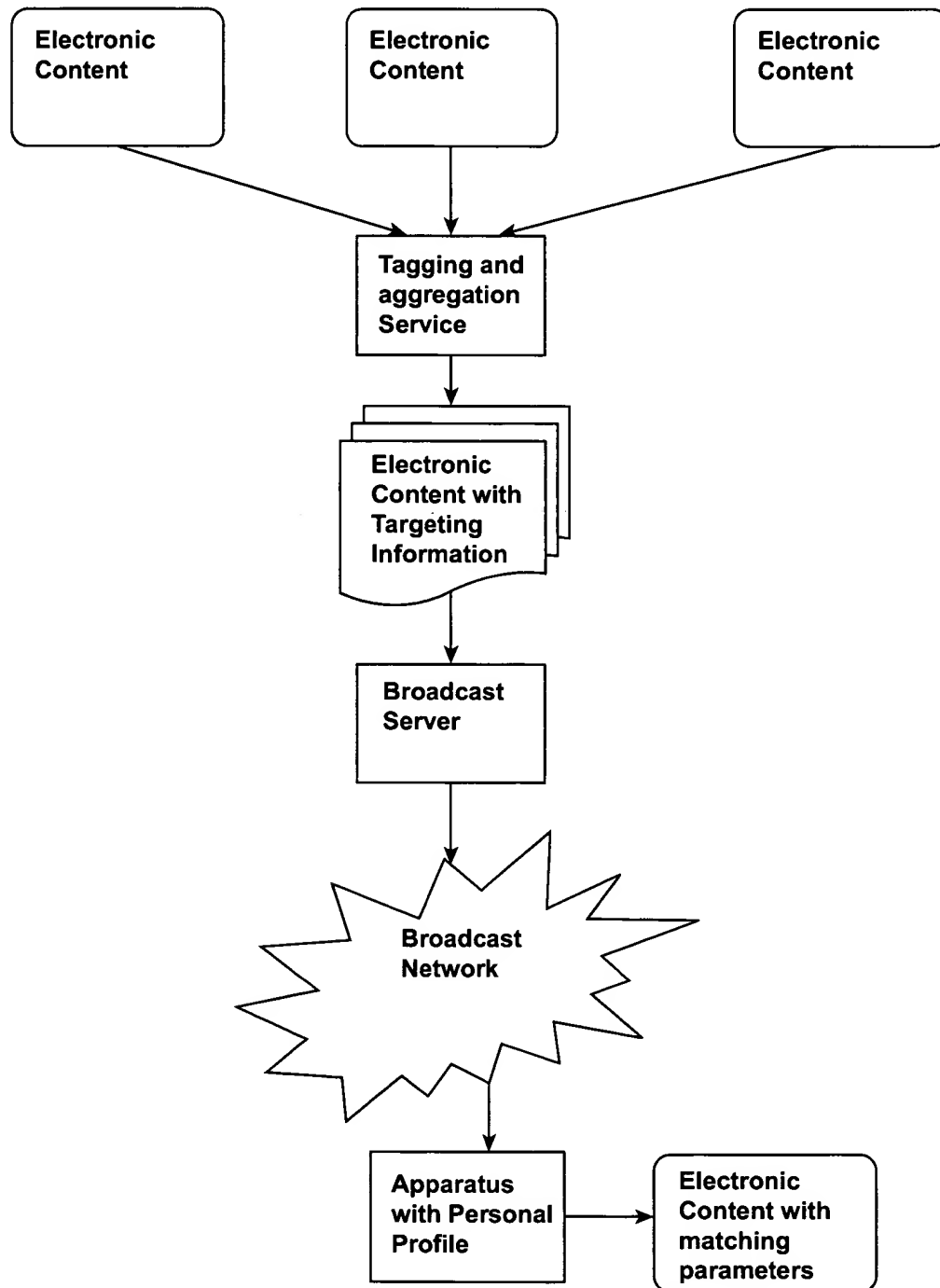


FIG. 42



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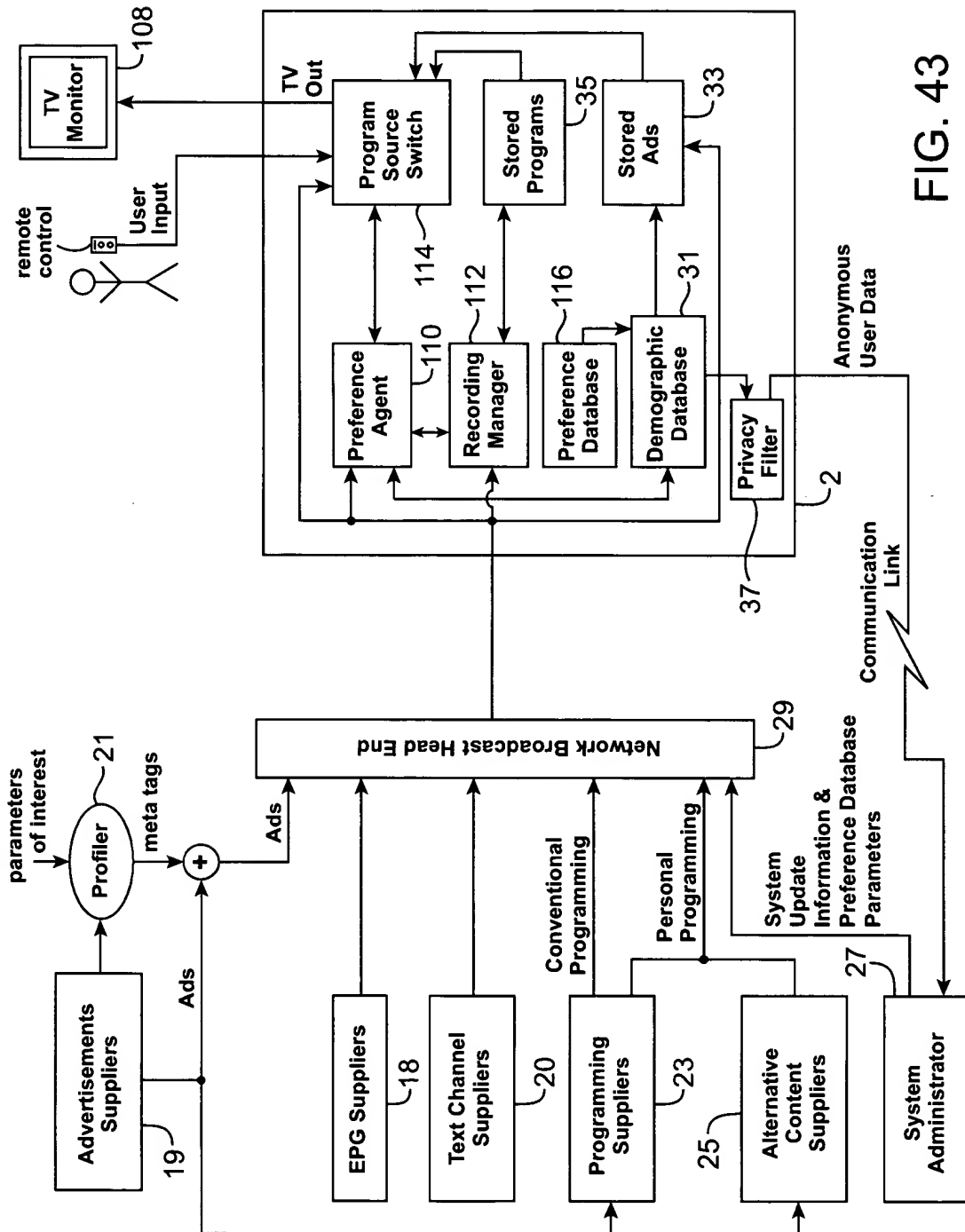


FIG. 43

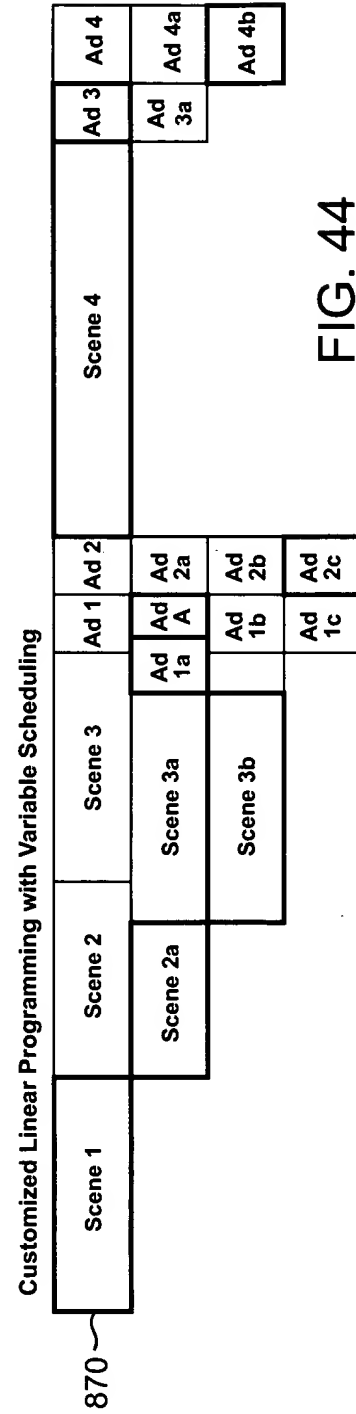
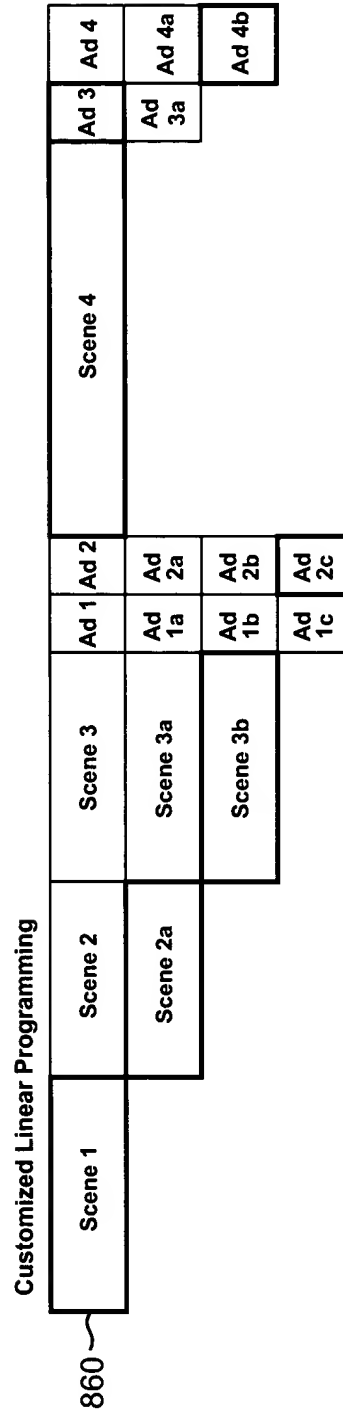
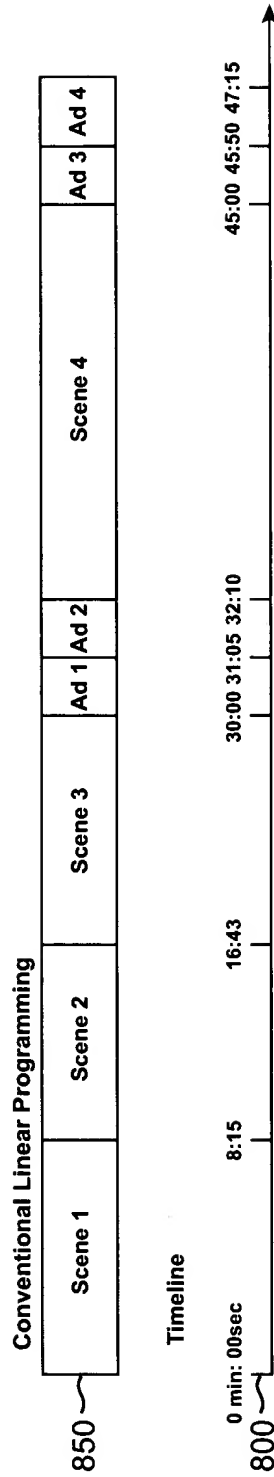


FIG. 44